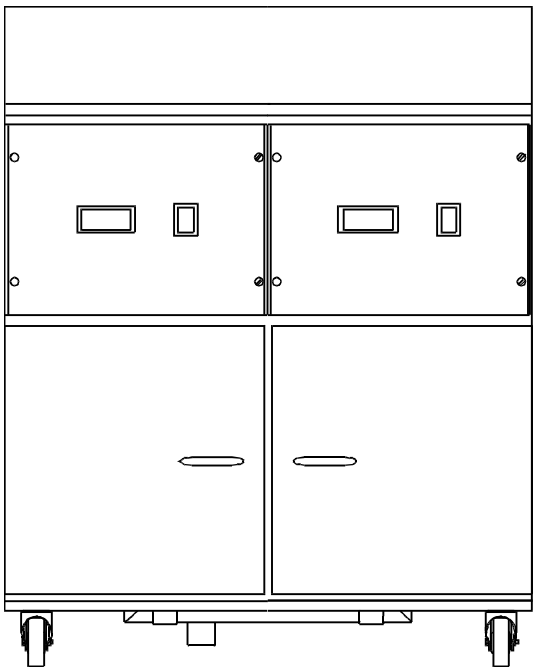
Pitco Frialator®

There's Always Something Cooking!

Installation, Operation, Maintenance, and Service Manual For The Taco Bell Rethermalizer Model RTG14

Taco Bell®



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NOTICES

There are three different types of notices that you should be familiar with, a NOTICE, CAUTION, and WARNING. A NOTICE is a special note used to call attention to a particularly important point. CAUTION is used to point out a procedure or operation which may cause equipment damage. The WARNING notice is the most important of the three because it warns of an operation that may cause personal injury. Please familiarize yourself with your new Rethermalizer before operating it and heed the notices throughout this manual. The WARNINGS are listed below and on the following page for your review prior to operating the unit.

FOR YOUR SAFETY

DO NOT store or use gasoline or other flammable vapors or liquids in the vicinity of this or any other appliance.

WARNING: Improper installation, adjustment, alteration, service or maintenance can cause property damage, injury or death. Read the installation, operating and maintenance thoroughly before installing or servicing this equipment.

TO THE PURCHASER

POST IN A PROMINENT LOCATION INSTRUCTIONS TO BE FOLLOWED IN THE EVENT THAT AN OPERATOR SMELLS GAS. OBTAIN THIS INFORMATION FROM YOUR LOCAL GAS SUPPLIER.

WARNING

This appliance is equipped with a three prong (grounding) plug. This is for your protection against shock hazard in the event of equipment malfunction. Always plug the unit directly into a properly grounded three-prong receptacle. DO NOT cut or remove the grounding (third) prong.

WARNING

DO NOT use an open flame to check for gas leaks! Keep all open flames away from the Rethermalizer until the installation is complete.

WARNING

A Rethermalizer equipped with casters and a flexible power cord, must be connected to the gas supply with a Quick-Disconnect device. This quick disconnect must comply with ANSI Z24.41. To limit the movement of the unit without depending on the connector or quick disconnect, a restraining cable must also be installed.

WARNING

There is an open gas flame inside the Rethermalizer. The unit may get hot enough to set nearby materials on fire. Keep the area around the unit free from combustibles.

WARNING

Ensure that the Rethermalizer can get enough air to keep the flame burning correctly. If the flame is starved for air it can give off a dangerous carbon monoxide gas. Carbon Monoxide is a clear odorless gas that can cause suffocation.

WARNING

Carbon monoxide can build up if you block the flue. Blocking the flue will also cause the unit to overheat. DO NOT obstruct the flow of combustion/ ventilation or air opening around the Rethermalizer. Ensure that you meet the minimum clearances specified in the installation instructions. Adequate clearance around the unit is necessary for servicing and proper burner operation.

THIS MANUAL MUST BE RETAINED FOR FUTURE REFERENCE

WARNING

Wait 5 minutes before attempting to relight the pilot. This will allow for any gas in the unit to dissipate.

WARNING

The power supply must be disconnected before servicing or cleaning the appliance.

WARNING

DO NOT supply the fryer with a gas that is not indicated on the data plate. If you need to convert the fryer to another type of fuel, contact your dealer.

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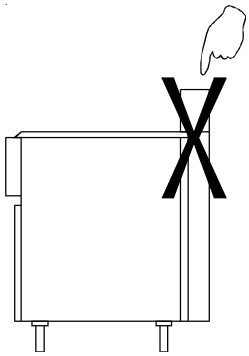
Chapter 1: General Information and Installation

The Pitco Frialator Rethermalizer is a revolutionary new reheating unit. By using Pitco Frialator's tube fired heating system, the Rethermalizer is up to temperature and ready to cook in minutes. Each of the heating tanks holds approximately 15 gallons of water which is maintained automatically by the unit. The temperature of each tank is monitored and controlled by its own electronic unit mounted in the front panel. Each electronic unit is preset at the factory to maintain the temperature of its tank at 195°F. Quick recovery time and even temperatures are assured by using a 55,000 BTU main burner system for each tank. The Rethermalizer is very easy to use allowing you to cook and not worry about the unit. However, it is important that you familiarize yourself with the operation and safety notices of this manual. This manual contains the installation, operation, and maintenance procedures for the Taco Bell Rethermalizer. Do not throw away this manual after use, store in a safe place for reference.

1.1 CHECKING YOUR NEW RETHERMALIZER

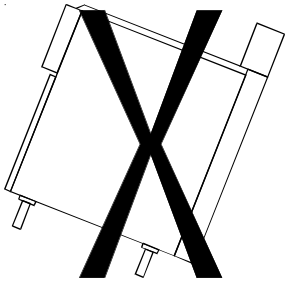
Every effort has been made to ensure that your Rethermalizer will be delivered to you in perfect condition. As you unpack the Rethermalizer, inspect the unit for damage. If something is damaged, DO NOT sign the bill of lading. Contact the shipper immediately, because the shipper is only responsible for 15 days after delivery. Check the packing list enclosed with your Rethermalizer to ensure that you have received everything on the list. If you are missing any parts, contact the dealer from whom the unit was purchased. As you unpack the Rethermalizer be careful to keep its weight evenly distributed.



Flue Vents

CAUTION

To prevent equipment damage, don't tilt the unit onto any three of its casters or pull the unit by the flue vents.



Locate your Pitco Frialator warranty and fill in the serial number of the Rethermalizer and the date received. You will find the serial number on the plate inside the door. Put your warranty in a safe place for future reference. DO NOT return the warranty sheet to Pitco Frialator. The Rethermalizer has been assembled for you at the factory and is ready to be installed.

1.1.1 Check Your Order

In the shipping crate with the Rethermalizer you will also find:

(1)	Cleaning Brush	(2)	Tube Screens
(1)	Meat Racks	(1)	Pan Support Rack Kit
(1)	Water Hose and Quick Disconnect		

1.2 ASSEMBLY AND LEVELING

When you receive your Rethermalizer it is completely assembled with the possible exception of the casters.

1.2.1 Caster Installation and Adjustment

Installing the casters on the Rethermalizer is done with a 7/16" wrench and socket. The casters must be installed before connecting the unit to the gas supply. The casters provide the necessary height to meet sanitation requirements and assure adequate air supply to the burner. Attach the casters by performing the following procedure.

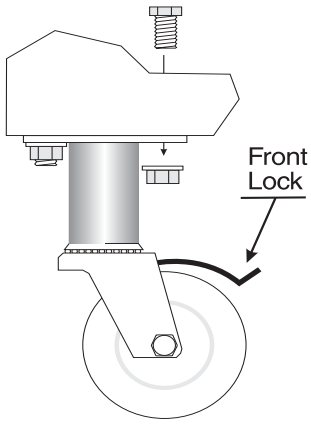
a. Lay the Rethermalizer on its back being careful not to damage the flue by pulling on it. Protect the outside of the unit with cardboard or a drop cloth when laying it down.

b. Attach each caster with the hex head cap nut supplied with the Rethermalizer. Each caster requires four 1/4-20 x 5/8" bolt.

c. Mount the bolts from the inside of the unit with the nut on the outside of the cooker. The nuts have lock washers attached to them, therefore it is not necessary to use lock washers.

d. When all six casters are mounted, stand the unit up being careful not to put too much weight on any one caster.

e. Move the Rethermalizer to the desired location and lock the wheels using the front locking devices on each caster.



1.3 INSTALLATION

Although it is possible for you to install and set up your new Rethermalizer, it is **STRONGLY** recommended that you have it done by qualified professionals. The professionals that install your new Rethermalizer will know the local building codes and ensure that your installation is safe. This manual provides the installer with valuable information on the installation of your Rethermalizer.

WARNING

DO NOT obstruct the flow of combustion/ventilation or air openings around the rethermalizer. Adequate clearance around the rethermalizer is necessary for servicing and proper burner operation. Ensure that you meet the minimum clearances specified in the installation instructions.

1.3.1 Installation Clearances

The Rethermalizer needs clearance around it for proper operation. Adequate clearances allow for servicing and proper burner operation. The clearances shown below are for cooker installation in combustible and non-combustible construction.

	Combustible Construction	Non-Combustible Construction
Back	6"	0"
Sides	6"	0"
Floor	4"	4"

1.3.2 Gas Connection

Your Rethermalizer will give you peak performance when the gas supply line is of sufficient size to provide the correct gas flow. The gas line must be installed to meet the local building codes or National Fuel Gas Code (NFPA 54-1984) and ANSI Z223.1-1988 (or most current). In Canada, install the Rethermalizer in accordance with CAN1-B149.1 and CAN1-B149.2 and local codes. Gas line sizing requirements can be determined by your local gas company by referring to National Fuel Gas Code, Appendix C, Table C-4 (natural gas) and Table C-16 (propane). The gas line must be large enough to supply the necessary amount of fuel to all appliances. The burner manifold operating pressure should be as specified on the data plate attached to the inside of the door. Other factors that are used to determine the piping requirements are BTU requirements of the appliances being connected and the length of pipe between the meter (main shut off) and the appliances.

WARNING

NEVER supply the Rethermalizer with a gas that is not indicated on the data plate. Using the incorrect gas type will cause improper operation. If you need to convert the unit to another type of fuel, contact your dealer.

1.3.2.1 Fuel Types - Each Rethermalizer is equipped to work with one type of fuel. The type of fuel with which the appliance is intended to operate is stamped on the data plate attached to the inside of the door.

WARNING

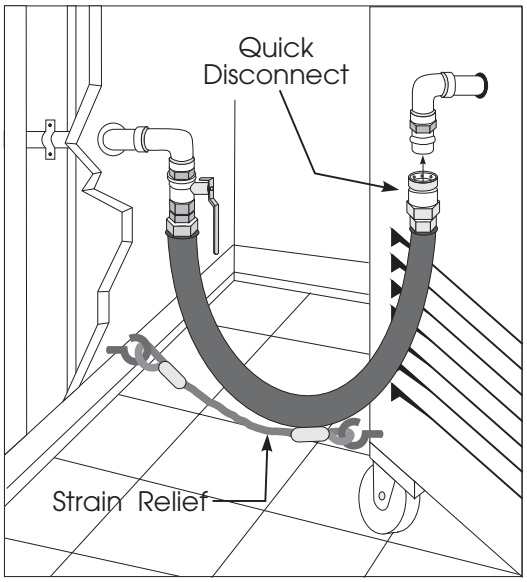
DO NOT use an open flame to check for gas leaks! Keep all open flames away from the unit until the leak test is complete.

1.3.2.2 Gas Line Connection - Connect the Rethermalizer to the gas supply line with a connector that complies with the Standard for Connectors for Movable Gas Appliances (ANSI Z21.69-1987). If you are installing a unit with casters use a quick disconnect discussed in the Quick Disconnect installation instruction, 1.3.2.3. Connect the gas line to the Rethermalizer using a pipe joint sealant that is resistant to liquefied petroleum. If the Rethermalizer was disconnected during the fuel line testing, use a solution of soap and water to leak test the new connection.

NOTICE

NEVER use an adaptor to make a smaller gas supply line fit the cooker connection. This may not allow proper gas flow for optimum burner operation, resulting in poor cooker performance.

1.3.2.3 Quick Disconnect Gas Connection - Units equipped with casters must be installed with connectors that comply with the Standard for Connectors for Movable Gas Appliances, ANSI Z21.69-1987, and Addenda Z21.69A-1989. This connection should include a quick disconnect device that complies with the Standard for Quick Disconnect Devices for Use With Gas Fuel , ANSI Z21.41-1989. When installing a quick disconnect you must also install a means for limiting the movement of the rethermalizer. This device will prevent the gas line or the quick disconnect from being strained. The restraining device should be attached to the cooker on the back panel as shown in the illustration. The quick disconnect, hose, and restraining device can be obtained from your dealer.



1.3.2.4 Fuel Supply Line Leak and Pressure Testing - The fuel supply system must be tested before the Rethermalizer is used. If the fuel line is going to be tested at a pressure greater than (>) 1/2 PSIG (3.45 kPa), make sure that the unit is disconnected from the fuel line. If the fuel line is to be tested at a pressure equal to or less than (≤) 1/2 PSIG (3.45 kPa), the Rethermalizer can be connected but the unit's gas valve must be shut. Test all gas line connections for leaks with a solution of soap and water when pressure is applied.

1.3.3 Plumbing Connections

The plumbing installation should be done by a licensed plumber and must comply with local and national codes. The water inlet line on the Rethermalizer is located on the back side of the unit and consists of a hose with a quick disconnect similar to that used for the gas connection. This line feeds water to the auto fill valves through the manual shut-off valves also located on the back of the unit. A drain line for each tank is underneath the unit and can be inserted into a drainage system. The drain lines for each tank are connected together to form a single common drain line. The drain line also has the overflow line from each tank connected to it. This connection is made after the drain valve to provide an unobstructed overflow path.

1.3.4 Electrical Connection

The electrical service used by the Rethermalizer must comply with local codes. If there are no local codes that apply, refer to the National Electrical Code (NEC) to install the service. In Canada refer to CSA Standard C22.1 and local codes. Wiring diagrams are provided inside the front panel of the Rethermalizer. The power requirements for the unit are shown below.

Input Voltage	120 VAC, 60Hz
Current per Rethermalizer	0.5 Amps

WARNING

This appliance is equipped with a three prong (grounding) plug for your protection against electrical shock hazard in the event of equipment malfunction. DO NOT cut or remove the grounding (third) prong.

The Rethermalizer has two power cords which supplies power to the unit's controls. The unit must be grounded in accordance with local code; if there is not a local code, comply with NEC ANSI/NFPA No. 70-1987. It is advised that these power cords be plugged into a wall receptacle supplied from the ventilation control. This will ensure that the Rethermalizer can not be operated unless the ventilator is also on to provide proper ventilation. Disconnect power to the Rethermalizer before cleaning or servicing.

1.3.5 Ventilation and Fire Safety Systems

Your new Rethermalizer must have proper ventilation to function safely and properly. Exhaust gas temperatures can reach as high as 1200°F. Therefore, it is very important to install a fire safety system. Your ventilation system should be designed to allow for easy cleaning. Frequent cleaning of the ventilation system and the Rethermalizer will reduce the chances of fire. Table 1-1 provides a list of reference documents that provide guidance on ventilation and fire safety systems. This table is not necessarily complete. Additional information can be obtained from the American Gas Association, 8501 East Pleasant Valley Road, Cleveland, OH 44131.

WARNING

Never stand on the rethermalizer to service or clean the hood.

CAUTION

Ensure that your ventilation system does not cause a back draft (down draft) at the unit's flue opening. Back drafts will not allow the Rethermalizer to exhaust properly and will cause overheating which may cause permanent damage. Damage caused by backdrafts will not be covered under equipment warranty. NEVER allow anything to obstruct the flow of combustibles or ventilation exiting from the unit's flue. DO NOT put anything on top of the flue area.

Table 1-1 Ventilation and Fire Safety References

Topic	Underwriters Laboratory Document	National Fuel Gas Code Document
Grease Extractor	ANSI/UL 710-1981	ANSI/NFPA 96-1987
Ventilation Hood	ANSI/UL 705-1984	ANSI/NFPA 96-1987
Filter Unit	ANSI/UL 586-1985 ANSI/UL 900-1987	ANSI/NFPA 96-1987
Types of Fire Extingushers and Detection Equipment		
	ANSI/UL 154-1983	ANSI/NFPA 12-1989
Dry Chemical	ANSI/UL 299-1984	ANSI/NFPA 17-1985
Water	ANSI/UL 626-1984	ANSI/NFPA 13-1989
Foam		ANSI/NFPA 11-1988
Sprinklers	ANSI/UL 199-1982	ANSI/NFPA 13-1989 ANSI/NFPA 13-1989
Smoke Detectors	ANSI/UL 268-1981	ANSI/FPA 72B-1986
Fire Detection	ANSI/UL 521-1987	ANSI/FPA 72B-1986

Excessive ventilation causes drafts, which will interfere with the proper operation of the pilot and the burner. Leave at least 18 inches of open space between the Rethermalizer's flue vent opening and the intake of the exhaust hood.

NOTICE

NEVER connect the blower hood vent directly to the flue openings. The direct flow of air will cause poor temperature recovery, poor ignition, inefficient operation of the Rethermalizer, and could extinguish the pilot.

1.4 INITIAL ADJUSTMENTS

After your Rethermalizer has been installed as described in section 1.3, it needs to be adjusted to ensure that it will perform as designed. These adjustments must be performed by a **qualified person**. To perform these adjustments the following tools will be needed:

- Manometer (low pressure gauge)
- DC Millivolt Meter

1.4.1 Visual Checks and Equipment Locations

Before you begin filling and adjusting the unit, perform the following visual checks:

a. Move the Rethermalizer to its permanent cooking position and lock the caster wheels. Ensure that the Rethermalizer drain is lined up with the floor drain.

b. Check the High Limit probe located inside the tank. Ensure that the mounting screws are tight to prevent the probe from coming loose during operation. Figure 1-1 shows the location of the High Limit probe, Temperature probe, and the Water Level sensors. Also shown are the over flow stand pipe and the water entry nozzle. Look down inside the Rethermalizer tanks to see the probes.

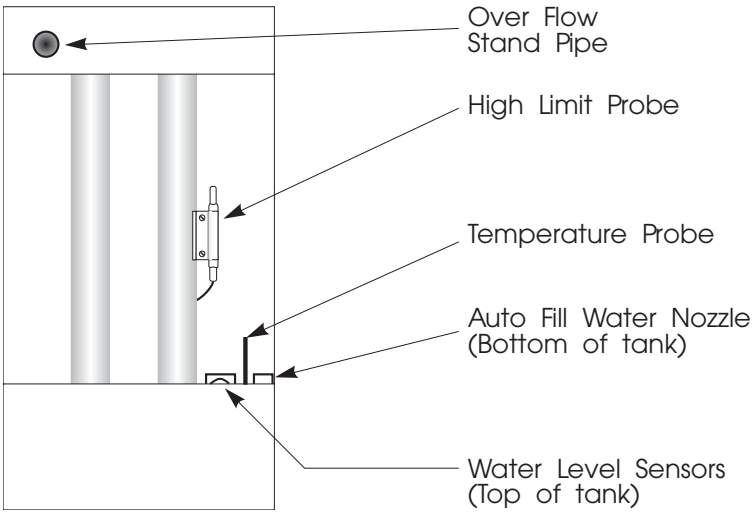


Figure 1-1 Component Locations, Inside Tank

1.4.2 Filling the Rethermalizer

The Rethermalizer is equipped with an automatic water level maintaining system. To fill the unit with water place the ON/OFF switch in the ON position. This causes the solenoid valve to open and supply water to the unit through the fill nozzle in the bottom of the tank. The tank will continue to fill until the water level reaches the level sensors. When both water level sensors are covered the solenoid valve will close stopping the flow of water. During normal operation the automatic fill system will maintain the water level at the proper height.

NOTE

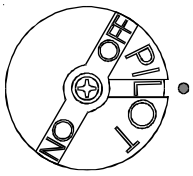
During normal operation the automatic water fill system will continue to control the water level in the Rethermalizer tank. If the water control system turns on while the main burners are lit the main burners will turn off. This is normal and will not affect the operation of the Rethermalizer. When the tank refills to the high level probe the solenoid will close and the main burners will relight.

1.4.3 Pilot Light System

The Rethermalizer uses a manual pilot light system to light the main burners. The pilot light receives its gas supply through the electrically controlled gas valve. To light the pilot perform the procedure below.

a. Each side of the unit has its own gas supply valve. This allows one side to be serviced while the other is operating. These gas valves should normally be open.

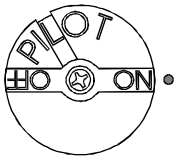
b. Turn the gas valve knob to the PILOT position and push in on the knob. Hold the knob in for approximately one minute to purge the air out of the line. Hold a flame to the pilot light until the pilot ignites. This may take a little while the first time you light the Rethermalizer because of air in the lines. Once lit, hold the knob in for approximately 60 seconds and then release.



WARNING

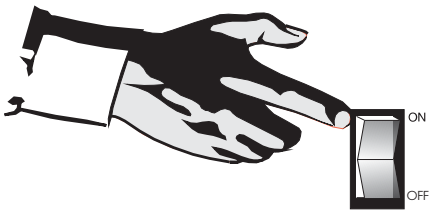
Wait 5 minutes before attempting to relight the pilot. This will allow for any gas in the unit to dissipate.

c. Turn the gas knob counterclockwise to the ON position.



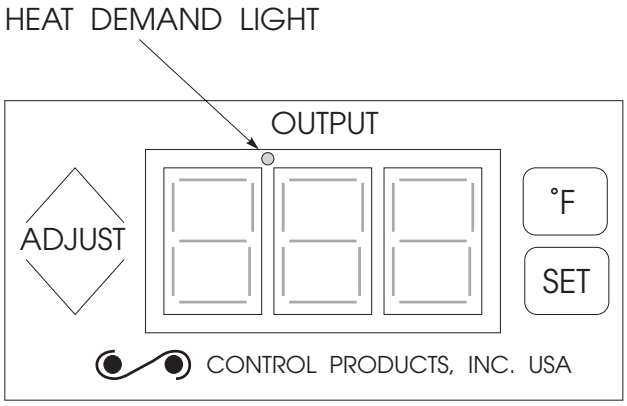
d. If the pilot goes out repeat step c. If after three tries the pilot will not remain lit, contact a qualified service technician.

e. Place the ON/OFF switch in the ON position. The electronic control unit will come on and display the temperature of the water. There will also be a red light lit between the left and middle digits of the display. This light indicates that the electronic control unit is calling for heat. If the water level is below the low level sensor the water solenoid valve will open and fill the tank.



f. When the water in the tank is at the correct level the main burner will light and be controlled by the electronic control unit. The pilot burner will remain lit regardless of the switch position.

g. The burners will remain lit until the temperature reaches 195°F where they will turn off. While the burners are off the red light in the electronic display will be off. The burners will maintain the water temperature between 194°F and 196°F.



h. When the ON/OFF switch is in the ON position the water level will be maintained by the water fill system.

1.4.3.1 Pilot Flame Adjustment - The pilot flame should be adjusted to produce between 300 and 500 millivolts output from the thermopile. Figure 1-2 shows the pilot assembly with examples of the incorrect and correct pilot size. Example A illustrates a pilot size that is too small to produce sufficient millivolt output. Example B is the correct size for proper millivolt output.

Figure 1-2 Pilot Assembly, Flame Adjustment

a. This test requires the DC millivolt meter set to a scale of 0-1000mV. Using leads with sharp probes will help in taking the required reading.

b. Locate the thermopile wires coming from the High Limit box going to the gas shut off valve. The wire insulation size decreases near the gas valve connections.

c. Connect the negative (-) test probe to the pilot tubing (ground).

d. Connect the positive (+) test probe to one of the High Temperature Limit terminal connections.

e. Remove the pilot flame adjustment cover.

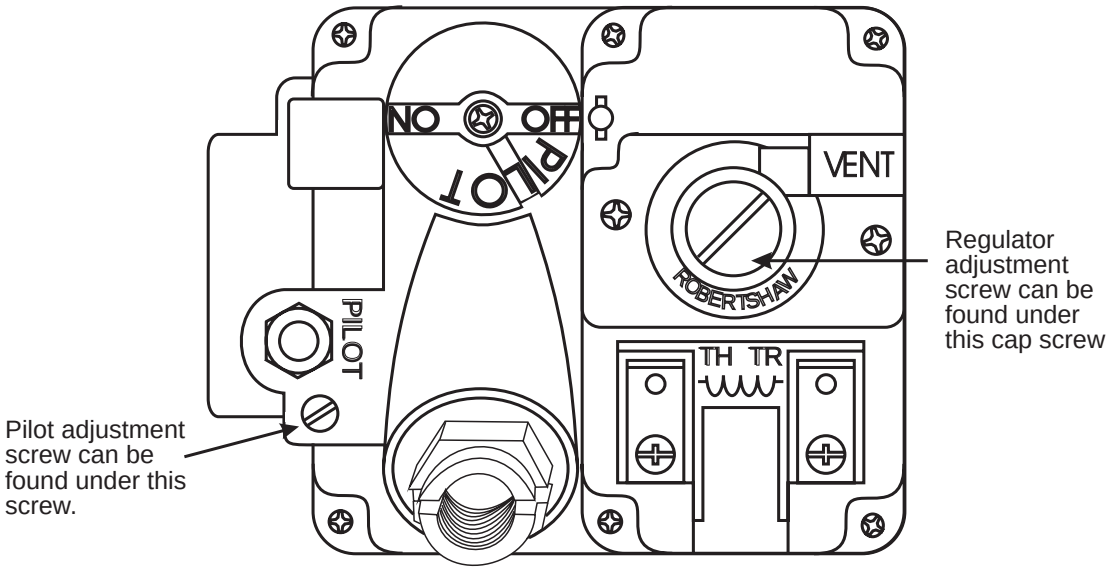


Figure 1-3 Gas Valve Showing Location of the Pressure Regulator and Pilot Adjusters.

f. Turning the flame adjusting screw clockwise lowers the flame and the millivolt output. Turning the screw counterclockwise increases flame size and millivolt output.

g. Rotate the screw in the direction to achieve a reading of 400±50 mV.

NOTE

Allow 3 to 5 minutes between flame adjustments to allow the reading to settle.

h. Replace the pilot flame adjusting screw cover.

1.4.4 Main Burner System

For the burners to work the gas supply valve must be open and the main power switch must be on. The main burners receive gas from the main gas supply through the electric control valve. When the electronic control unit calls for heat (and the tank is at the proper water level), the gas control valve opens. After the burner system is operating, perform the burner adjustments in the following procedure. Figure 1-4 illustrates the different conditions possible for the main burner.

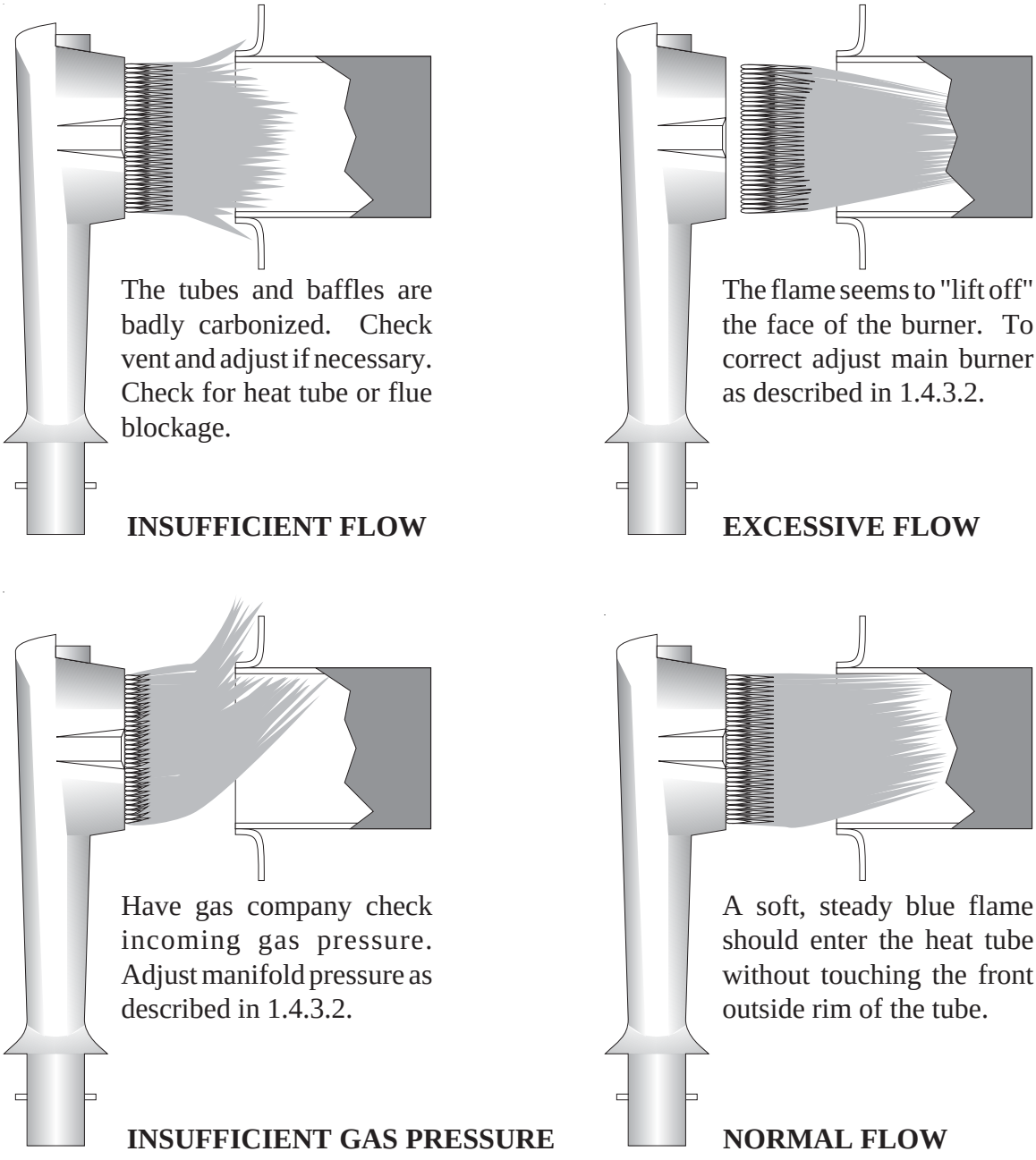

The tubes and baffles are badly carbonized. Check vent and adjust if necessary. Check for heat tube or flue blockage.
INSUFFICIENT FLOW
The flame seems to "lift off" the face of the burner. To correct adjust main burner as described in 1.4.3.2.
EXCESSIVE FLOW
Have gas company check incoming gas pressure. Adjust manifold pressure as described in 1.4.3.2.
INSUFFICIENT GAS PRESSURE
A soft, steady blue flame should enter the heat tube without touching the front outside rim of the tube.
NORMAL FLOW

Figure 1-4 Main Burner Conditions

1.4.4.1 Gas Line Requirements - A properly installed gas supply system will deliver 7.0 ±2.0" w.c. natural gas (12.0 ±2.0" w.c. LP) to all appliances connected to the line, operating at full demand.

1.4.4.2 Burner Adjustment - The burners must be adjusted to deliver optimum flame. Adjust the burner flame using the following procedure.

a. Ensure that the gas control valve is in the PILOT position. Remove the manifold pressure tap plug and connect an accurate pressure gauge (range of 0-16" w.c. in 0.1" increments) or manometer.

b. Light the pilot burner for the unit being tested and place the ON/OFF switch in On to light the main burners.

c. The installed pressure gauge reading should be the same, ±0.1", as that marked on the data plate inside the door. If the pressure is correct go to step e, if not, adjust the pressure.

d. To adjust the pressure, remove the regulator adjustment screw cover (see Figure 1-3). Use a flat tip screwdriver to adjust the screw until the proper pressure is reached. Turning the screw clockwise will increase the pressure, counterclockwise will decrease the pressure.

e. When the pressure is correct, install the regulator adjustment screw cover.

f. To remove the pressure gauge, turn the gas control valve to PILOT. Remove the gauge and install the pressure tap plug.

g. Now that the pressure is set for proper operation, set the main burner flame. Unlock the air collars by loosening the set screw for the collars. Turn the gas control valve to ON and place the ON/OFF switch in ON to light the main burners.

h. Adjust the shape and size by raising or lowering the air collars to achieve a soft blue flame with well defined inner cones.

i. When the flames have been properly adjusted, lock the collars in place with the set screw provided.

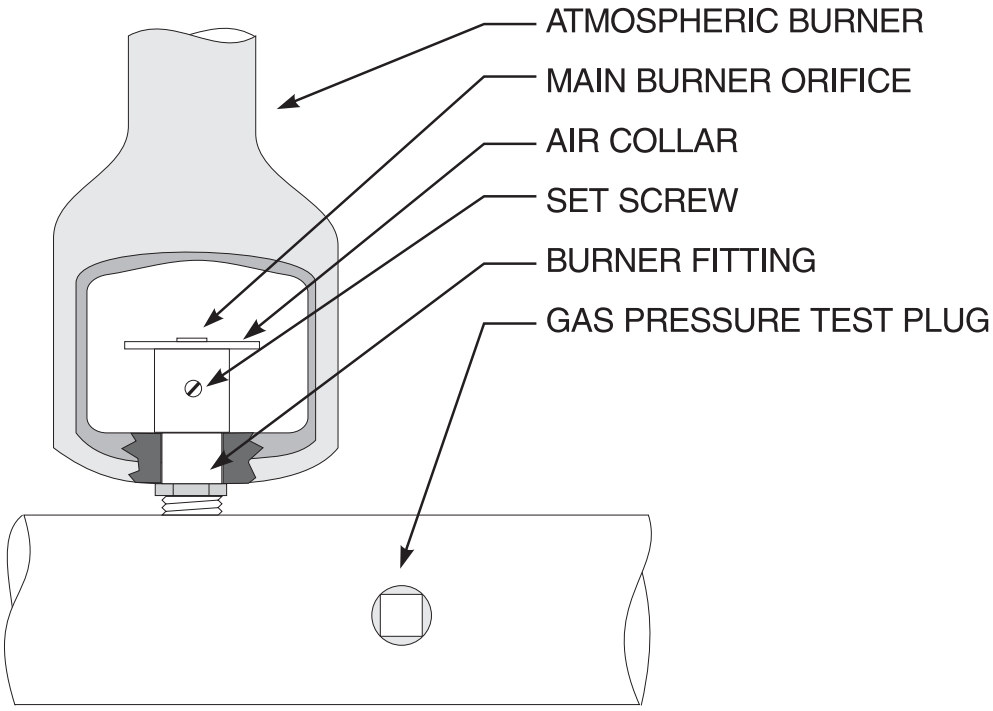


Figure 1-5 Air Collar

1.4.5 Initial Cleaning

When the Rethermalizer is shipped, many of its parts are covered with a thin coat of oil for protection. Before the unit is ready for use it must be cleaned to remove the oil coating and any foreign matter that may have accumulated during storage and shipment. Perform the cleaning as described below.

a. Fill the tank with water and add a mild detergent to the tank being cleaned.

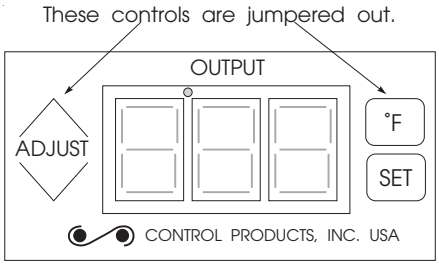
b. Turn the Rethermalizer on and allow it to reach normal operating temperature. Allow the unit to soak for a short time to remove the oil coating. Use the supplied cleaning brush to clean the tank.

c. When the cleaning is complete, turn off switch to OFF and drain the water.

d. When the tank has cooled, rinse it thoroughly with cool water. Continue to rinse the tank until the cleaner has been rinsed from the tank.

e. Now that the tank is clean, you are ready to fill and operate the Rethermalizer.

1.4.6 Electronic Control Unit



The electronic control unit is preset at the factory to maintain 195°F. If the control unit should become erratic contact service.

1.4.7 High Limit Switch

The High Limit switch will shut down the unit if the temperature reaches 425°F.

Chapter 2: Operating Instructions

This chapter describes how to operate your Rethermalizer to obtain the best performance. Included in this chapter are filling, operating, and cleaning instructions.

2.1 FILLING THE RETHERMALIZER

The Rethermalizer is equipped with an automatic water level maintaining system. To fill the unit with water place the ON/OFF switch in ON. This causes the solenoid valve to open and supply water to the unit through the fill nozzle in the bottom of the tank. The tank will continue to fill until the water level reaches the level sensors. When both water level sensors are covered the solenoid valve will close stopping the flow of water. During normal operation the automatic fill system will maintain the water level at the proper height.

NOTE

During normal operation the automatic water fill system will continue to control the water level in the Rethermalizer tank. If the water control system turns on while the main burners are lit the main burners will turn off. This is normal and will not affect the operation of the Rethermalizer. When the tank refills to the high level probe the solenoid will close and the main burners will relight.

2.1.1 Manual Operation of The Water Fill System

CAUTION

When the water solenoid is by-passed the automatic water fill system **WILL NOT** maintain the water level. The water level control system should remain in automatic during normal operation.

Although the water fill system is completely automatic, the solenoid valve can be by-passed manually to fill the tank. To by-pass the water solenoid valve open the valve in the by-pass pipe. This should only be done if the solenoid valve fails and the Rethermalizer needs to be operated. When finished filling the Rethermalizer ensure that the solenoid manual by-pass valve is returned to its normal position.

2.2 DAILY OPERATING INSTRUCTIONS

This section provides you with the information necessary to perform routine operations. To ensure that the product always comes out the very best, follow the preparation instructions for the food you are cooking.

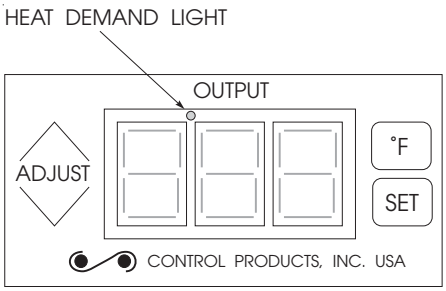
2.2.1 Start-Up and Use

a. Light the pilot light as described in section 1.4.3..

b. Place the ON/OFF switch in ON. If the tank is not at the proper operating height the solenoid valve will open and fill the tank.

c. When the water reaches the proper operating level. The main burners will light and the electronic unit will take over and control the water temperature. When the electronic control unit is calling for heat the red LED will also be on.

d. The main burners will remain on until 195°F is reached at which time they will turn off. The Rethermalizer is now up to temperature and ready to accept the food to be heated. Place the food to be heated in the rack and lower into the water.

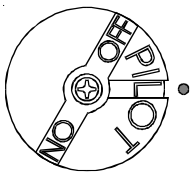


e. The electronic unit will maintain the water temperature at approximately 195°F and the water fill system will keep the water at the proper level.

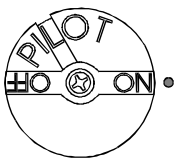
2.2.2 Shutdown

There are two shutdown modes for the Rethermalizer, STANDBY and COMPLETE. The standby mode removes the ability for the unit's main burners to cycle. Complete shutdown turns off the gas supply to the unit.

STANDBY Place the ON/OFF switch in the OFF position. Depress and turn the gas valve clockwise to the PILOT position. The Rethermalizer is now in Standby and can remain this way for only brief periods of time. NEVER leave the unit in standby overnight.



COMPLETE To completely shut down the Rethermalizer, turn the gas valve clockwise to the OFF position.



2.3 DAILY CLEANING

WARNING

The power supply must be disconnected before servicing or cleaning the appliance

Your Rethermalizer should be cleaned every day to maintain peak performance and appearance. Perform the procedures below every day.

a. Use warm water with a mild detergent to clean exterior surfaces. Wipe down the unit using a clean soft cloth to clean up water spillage.

b. Use a non-abrasive scouring powder or pad to clean stains if necessary.

c. Perform the cleaning of the Rethermalizer described in section 3.1 at least weekly.

Chapter 3: Maintenance, Adjustments, and Service

This chapter provides you with the information and procedures necessary to perform Rethermalizer maintenance, adjustments, and service. If after performing maintenance on your Rethermalizer it does not operate properly, contact your authorized service center.

WARNING

The power supply must be disconnected before servicing or cleaning the appliance.

NOTICE

The unit has casters and therefore it has a quick disconnect gas connection and a restraining device. Care should be exercised when moving the unit out to be serviced. When you are moving the unit back into place ensure that you connect the restraining device before you move the unit back into place. You should also be careful not to kink the gas or water hose.

3.1 WEEKLY CLEANING

The continuous filling and evaporation of water from the Rethermalizer will cause deposit build up around the tank. At least once a week the unit should be thoroughly cleaned to remove these deposits and generally clean the unit. Perform the cleaning as described below.

a. Fill the tank with water and add a mild detergent to the tank being cleaned.

b. Turn the Rethermalizer on and allow it to reach normal operating temperature. Allow the unit to soak for a short time to remove residue. Use the cleaning brush to remove deposits from the tank cooking surface. You can use a non-abrasive scouring powder or pad to clean stains if necessary. When cleaning around the High Limit bulb be careful not to damage the bulb or its capillary tube.

c. When the cleaning is complete, turn off the unit and shut the gas valve and drain the water.

d. When the tank has cooled, rinse it thoroughly with cool water. Continue to rinse the tank until the cleaner has been rinsed from the tank.

e. Now that the tank is clean, you are ready to fill and operate the Rethermalizer.

f. If during cleaning, or any other reason, the restraining device is disconnected, it must be reconnected and the Rethermalizer returned to its original cooking position before operated.

3.2 FLUE AND BAFFLE INSPECTION

It is recommended that once every six months with the cooker cooled down you examine the flue area and the burner tube baffles. Check for corrosion or blockage of the flue and erosion of the baffles. The burners should be removed to thoroughly inspect the baffles. If necessary clean the heat tube area and replace the baffles if they are eroded or distorted. Ensure that the cooker is shutdown and do not turn it on during the examination. Examination of the flue area during cooking may cause bodily injury.

3.3 SERVICE

If servicing is required, electrical components can be accessed through the front panel. To gain access to the front panel electrical components, remove the four screws on the front panel. Remove the front panel and set aside with the four screws for installation after servicing is complete. An electrical diagram is supplied inside the front panel for use by an authorized service person. There is also an electrical diagram in the back of this manual. The electrical diagram can be used to verify the proper operation of the electrical systems. After servicing is complete, the diagram should be replaced for future reference and the front panel installed.

WARNING

To prevent burns, always ensure that the unit is completely SHUT DOWN and COOLED down before working on the Rethermalizer. Do not break any gas connections while the unit is connected to a gas supply line.

WARNING

The power supply must be disconnected before servicing or cleaning the appliance.

NOTICE

The unit has casters and therefore has a quick disconnect gas connection and a restraining device. Care should be exercised when moving the unit out to be serviced. When you are moving the unit back into place ensure that you connect the restraining device before you move the unit back into place. You should also be careful not to kink the gas or water hose.

3.3.1 Replacement Procedures

These procedures are provided to the qualified technician as a guide to removal and replacement of various rethermalizer components. If a test is required to verify component operation after installation, it will be referenced.

3.3.1.1 Main Burner Removal and Replacement

a. Loosen the set screw in the base of the burner casing.

b. Unscrew and remove the two hex head screws at the top of the burner.

c. Remove the set screw and remove the air collar from the burner. Lift the burner up to clear the top of the burner fitting. Remove the burner from the rethermalizer.

d. To re-install the burner, reverse the procedure.

3.3.1.2 Changing the Main Burner Orifice

a. Unscrew the orifice with a 3/8" wrench and remove the orifice.

b. Insert the new orifice and tighten with the 3/8" wrench. Ensure the orifice is tight enough to prevent gas leakage around the threads.

3.3.1.3 Replacing the Heat Baffles

a. Remove the Main Burner as described in 3.3.1.1.

b. The heat baffles are located inside the heat tubes. The baffles are attached to the heat tube by supports that are tack welded to the heat tube. Using a chisel, break away the baffle support and remove the old baffles. Be careful not to puncture the heat tubes because this will require complete tank replacement.

c. Insert the new baffles in the tubes in the original position. The new baffles do NOT need to be welded in place.

d. Install the main burners.

3.3.1.4 Pilot Burner Removal and Replacement

a. Disconnect gas line from the pilot assembly. Back off the locking nut for the thermopile. Remove the thermopile from the pilot assembly.

b. Unscrew and remove the two screws that attach the pilot assembly to the rethermalizer tank. Lift the entire pilot assembly out of the rethermalizer.

c. To replace the pilot assembly, reverse the procedure.

3.3.1.5 Pilot Orifice Replacement

a. Unscrew the tubing nut from the pilot tubing connection at base of the pilot burner. The pilot orifice is located inside the tubing connection.

b. Remove the orifice and replace with the new orifice. Ensure the orifice is tight enough to prevent gas leakage around the threads.

c. Replace the tubing in the pilot tubing connection and tighten the tubing nut tight enough to prevent gas leakage.

3.3.1.6 Thermopile Replacement

a. Unscrew and remove the thermopile from the pilot assembly.

b. Disconnect the thermopile connection at the gas valve.

c. Insert the new thermopile in the pilot assembly.

d. Connect the thermopile to the gas valve.

e. Adjust the pilot flame as described in 1.4.3.

3.3.1.7 High Limit Control Replacement

The High Limit control includes a temperature sensor inside the rethermalizer tank, control unit inside the rethermalizer cabinet, and connecting capillary tubing.

CAUTION

The High Limit control capillary tubing is very delicate. Be VERY CARE-FUL when working with the capillary tubing. If the tubing is kinked or broken the High Limit control is no longer usable.

a. Drain the water from the rethermalizer and remove the heat tube screens.

b. The High Limit control probe (heat sensor) is clamped to the heat tube inside the tank. Unscrew and remove the two screws in the probe clamp.

c. Remove the probe from the clamp and straighten the capillary tubing. Unscrew the small hex nut inside the cabinet at the bottom of the tank for the High Limit control.

d. Unscrew the large connector nut from the tank and pull the probe and capillary tubes through the opening.

e. Remove the two mounting screws from the High Limit control bracket and remove the High Limit control unit.

f. Disconnect the two wires from the High Limit.

g. Reverse the procedure to install the new High Limit control.

h. Use pipe joint compound on the large fitting before installing to prevent water leakage. DO NOT use joint compound on the small nut.

3.3.1.8 Temperature Controller Replacement

The temperature controller is press fit into the front panel of the Rethermalizer. To replace or perform maintenance in the unit you must gain access to the back of the controller.

a. Remove the four screws that hold the front panel on.

b. Disconnect the wires from the back of the control unit.

c. Depress the side tabs on the controller and slide it out of the panel.

d. Install the new controller by reversing the procedure.

3.3.2 Temperature Controller Calibration

The temperature controller does not need routine calibration. It will maintain its factory set calibration during normal operations. In some instances if the controller receives a static charge it can become erratic. Static charge can scramble the controllers program. If this should happen first try to correct the problem by draining the tank and allowing to refill with cool water. This will drop the temperature of the water well below the normal operating temperature and may reset the controller program. If this does not reset the controller perform the calibration procedure below.

a. Gain access to the rear of the controller by removing the front panel of the rethermalizer.

b. Install a jumper between the +5 and -3 volt terminals. This enables the controls on the front of the controller.

NOTE

If during the setting procedure you stop for longer than 15 seconds the controller will revert to the temperature display mode WITHOUT changing its settings.

c. Adjust the differential temperature limit by pressing the °F switch. The display will show dF1. Press °F again to display the differential setting. For proper operation this number must be a positive valve. Use the up or down Adjust keys to set the differential number.

d. Press the °F key until the display goes blank. This completes the differential adjustment.

e. To set the setpoint of the controller press the SET key. The display will show SP 1. Press the SET key again to display the current setting.

f. If the value showing is incorrect use the up and down adjust keys to change the setting.

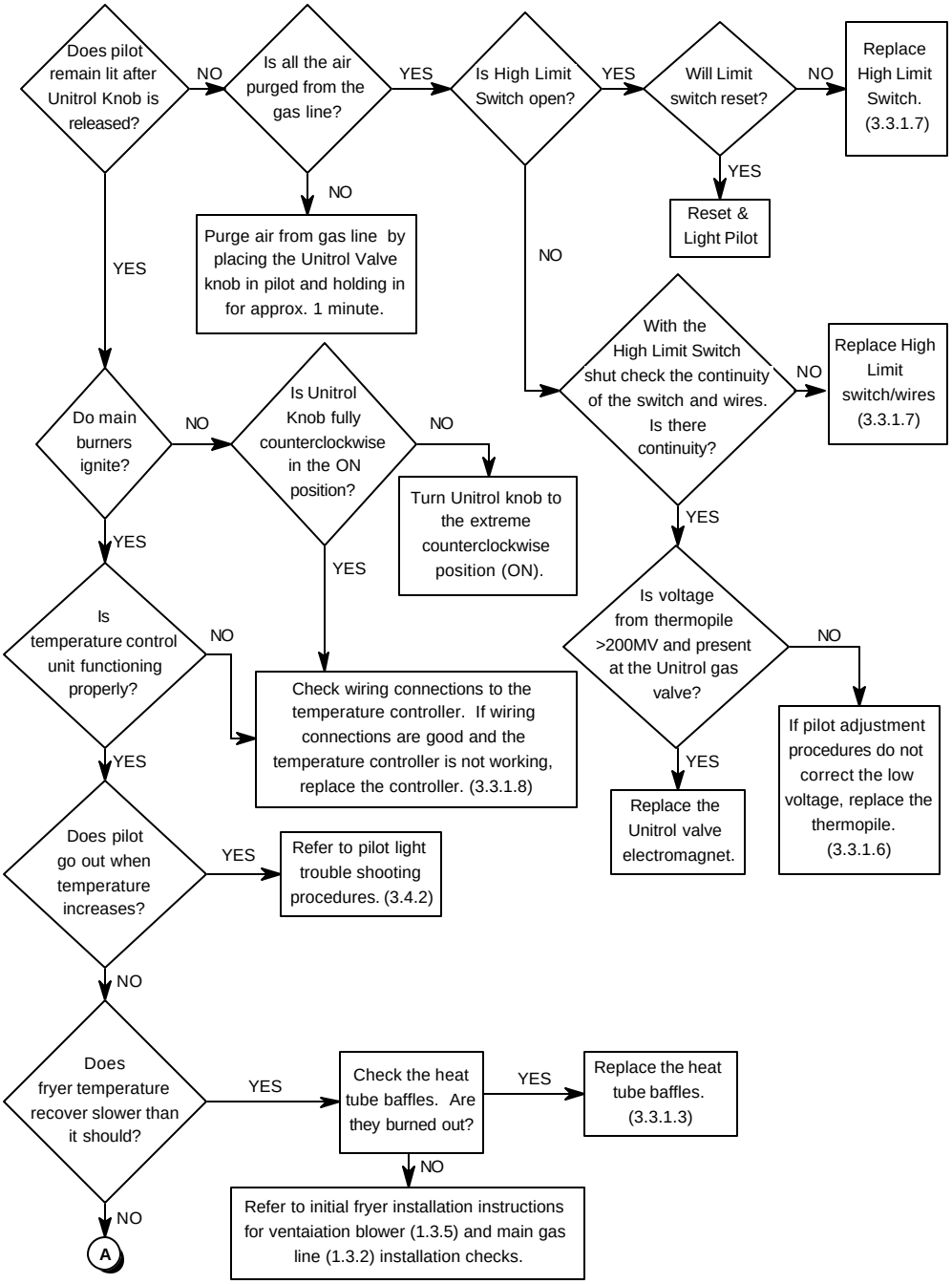
g. Once the value is correct press the SET key again until the display goes blank. This completes the set point programming.

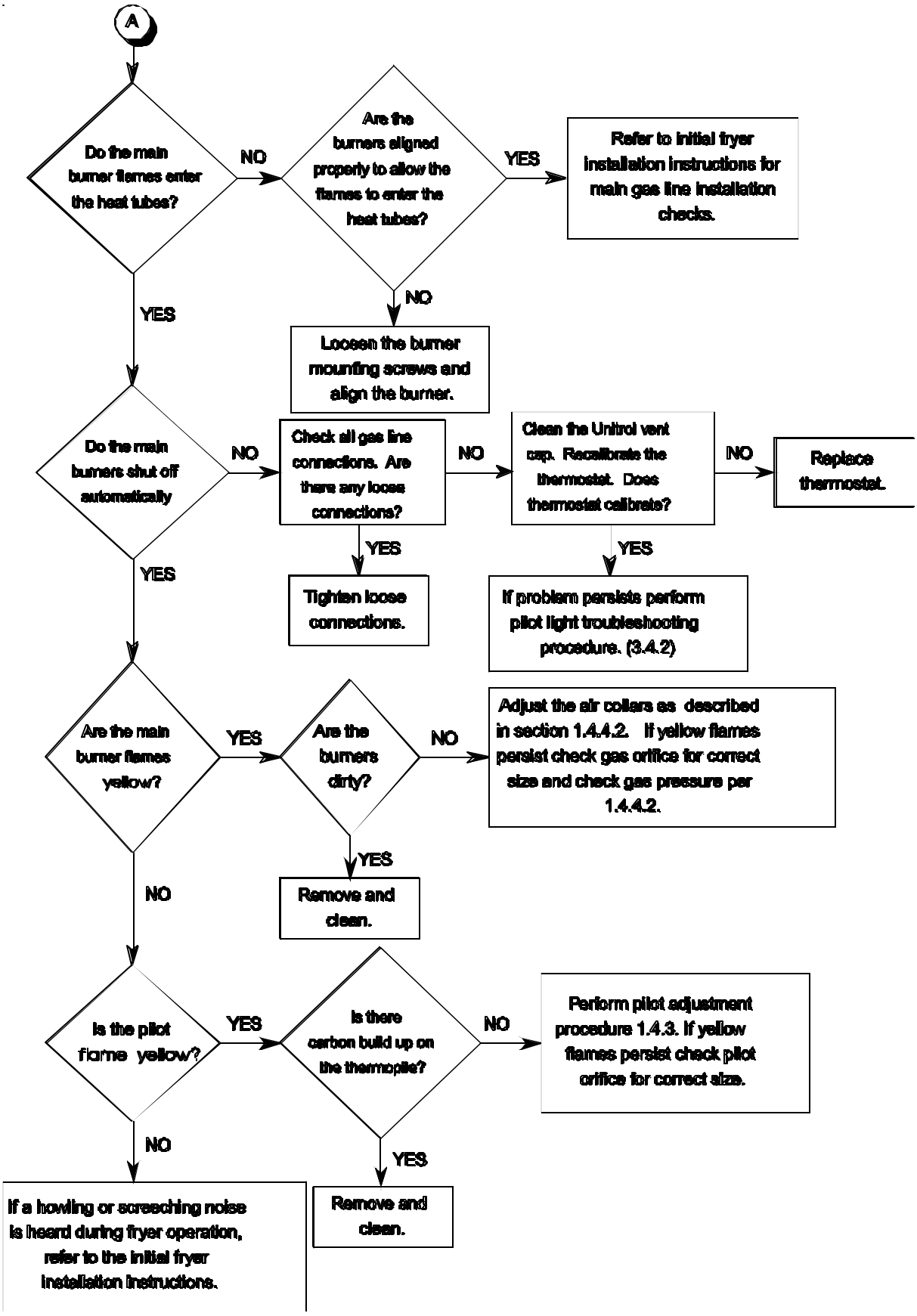
3.4 TROUBLESHOOTING

This section is provided to aid you in the event of rethermalizer trouble. If these troubleshooting procedures do not correct your problem contact your Authorized Service And Parts Representative (ASAP).

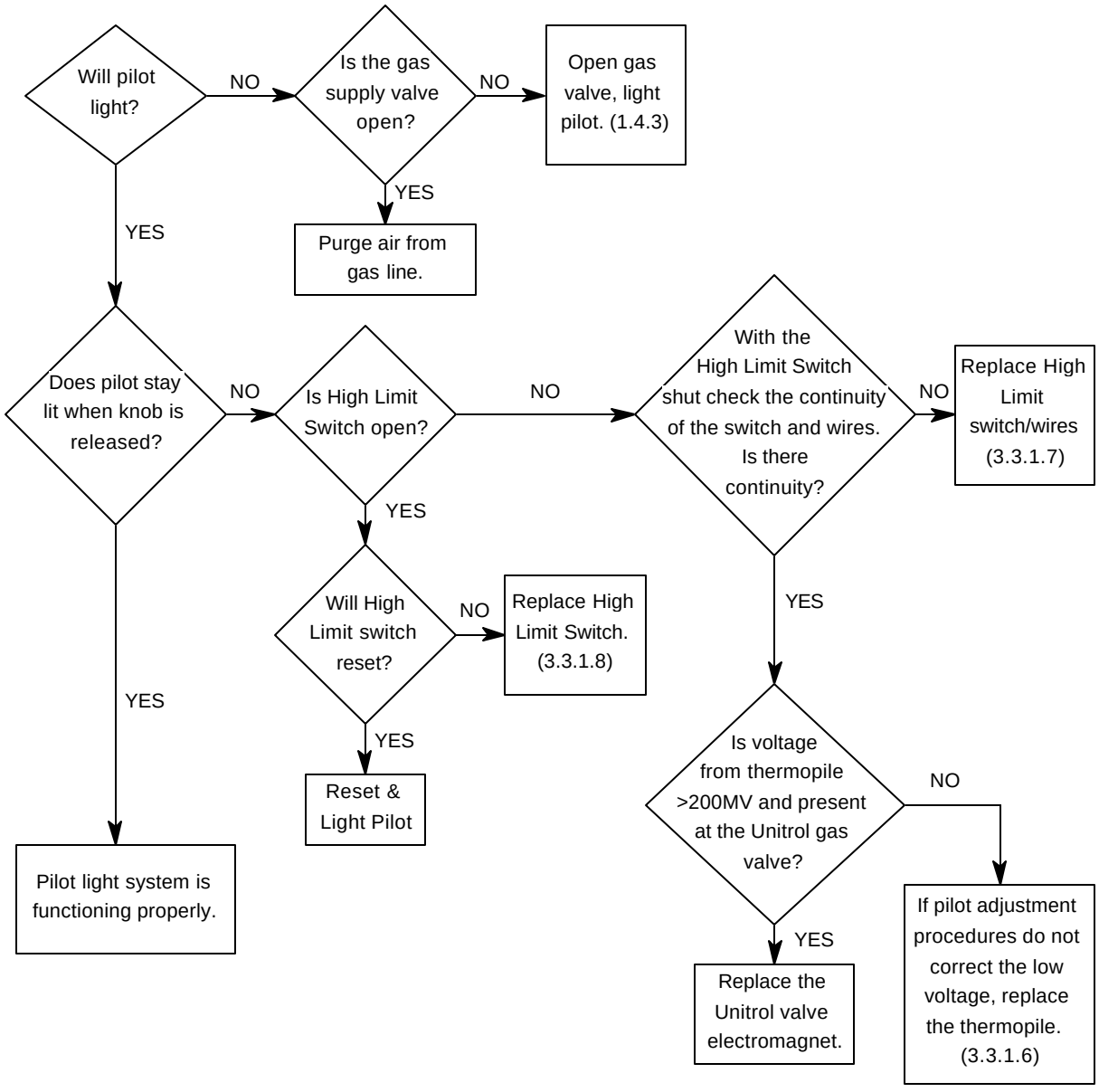
3.4.1 Rethermalizer Troubleshooting

Refer to this section to correct common problems that may be encountered in equipment operation.


Does pilot remain lit after Unitrol Knob is released?
NO
Is all the air purged from the gas line?
YES
Is High Limit Switch open?
YES
Will Limit switch reset?
NO
Replace High Limit Switch. (3.3.1.7)
YES
Reset & Light Pilot
NO
Purge air from gas line by placing the Unitrol Valve knob in pilot and holding in for approx. 1 minute.
YES
NO
With the High Limit Switch shut check the continuity of the switch and wires. Is there continuity?
NO
Replace High Limit switch/wires (3.3.1.7)
Do main burners ignite?
NO
Is Unitrol Knob fully counterclockwise in the ON position?
NO
Turn Unitrol knob to the extreme counterclockwise position (ON).
YES
YES
YES
Is temperature control unit functioning properly?
NO
Check wiring connections to the temperature controller. If wiring connections are good and the temperature controller is not working, replace the controller. (3.3.1.8)
Is voltage from thermopile >200MV and present at the Unitrol gas valve?
NO
If pilot adjustment procedures do not correct the low voltage, replace the thermopile. (3.3.1.6)
YES
YES
Replace the Unitrol valve electromagnet.
Does pilot go out when temperature increases?
YES
Refer to pilot light trouble shooting procedures. (3.4.2)
NO
Does fryer temperature recover slower than it should?
YES
Check the heat tube baffles. Are they burned out?
YES
Replace the heat tube baffles. (3.3.1.3)
NO
Refer to initial fryer installation instructions for ventaiation blower (1.3.5) and main gas line (1.3.2) installation checks.
NO
A


A
Do the main burner flames enter the heat tubes?
NO
Are the burners aligned properly to allow the flames to enter the heat tubes?
YES
Refer to initial fryer installation instructions for main gas line installation checks.
YES
NO
Loosen the burner mounting screws and align the burner.
Do the main burners shut off automatically
NO
Check all gas line connections. Are there any loose connections?
NO
Clean the Unitrol vent cap. Recalibrate the thermostat. Does thermostat calibrate?
NO
Replace thermostat.
YES
YES
Tighten loose connections.
YES
If problem persists perform pilot light troubleshooting procedure. (3.4.2)
Are the main burner flames yellow?
YES
Are the burners dirty?
NO
Adjust the air collars as described in section 1.4.4.2. If yellow flames persist check gas orifice for correct size and check gas pressure per 1.4.4.2.
YES
NO
Remove and clean.
Is the pilot flame yellow?
YES
Is there carbon build up on the thermopile?
NO
Perform pilot adjustment procedure 1.4.3. If yellow flames persist check pilot orifice for correct size.
NO
YES
If a howling or screeching noise is heard during fryer operation, refer to the initial fryer installation instructions.
Remove and clean.

3.4.2 Troubleshooting Pilot Burner


Will pilot light?
NO
Is the gas supply valve open?
NO
Open gas valve, light pilot. (1.4.3)
YES
Purge air from gas line.
YES
Does pilot stay lit when knob is released?
NO
Is High Limit Switch open?
NO
With the High Limit Switch shut check the continuity of the switch and wires. Is there continuity?
NO
Replace High Limit switch/wires (3.3.1.7)
YES
Will High Limit switch reset?
NO
Replace High Limit Switch. (3.3.1.8)
YES
Reset & Light Pilot
YES
Pilot light system is functioning properly.
YES
Is voltage from thermopile >200MV and present at the Unitrol gas valve?
NO
If pilot adjustment procedures do not correct the low voltage, replace the thermopile. (3.3.1.6)
YES
Replace the Unitrol valve electromagnet.

Chapter 4: Parts

This chapter contains listings of the components used in the Taco Bell Rethermalizer. The illustrations in this chapter are provided to show relative location of component within the fryer. With each illustration ther is a table of components listed by illustration number.

At the end of this chapter is an alphabetical and numerical listing of most of the common parts in the fryer.

Table 4-1 Tank and Cabinet

Item #	QTY/ Unit	Part Number	Description
1	1	B3310502-C	Tank
1	1	B3310502-C	Tank
2	1	B1811501	Cabinet, Painted
3	1	A1619202	Back Strip
4	1	B2301109	Door
5	1	B7230302	Hinge, Bottom Right Hand Door
6	1	B7230202	Hinge, Top Right Hand Door
7	2	P6071483	Plug, Hole
8	2	PP10025	Screw
9	1	PP11006	Handle
10	1	P6071300	Magnet
11	1	A1819602	Bracket, Door Magnet
12	1	B3609901	Edge, Marine
13	1	A1822101	Cabinet Spacer, Tank Holder
14	1	A4103602	Splash Back
15	4	P0075300	Screw, 3 #10 x 5/8" Self Drill
16	2	PP10728	Caster With Brake
17	2	PP10652	Caster Without Brake
18	4	A3901101	Caster Mounting Plate
19	16	P0020600	Bolt 1/4-20
20	16	P0093300	Nut 1/4-20

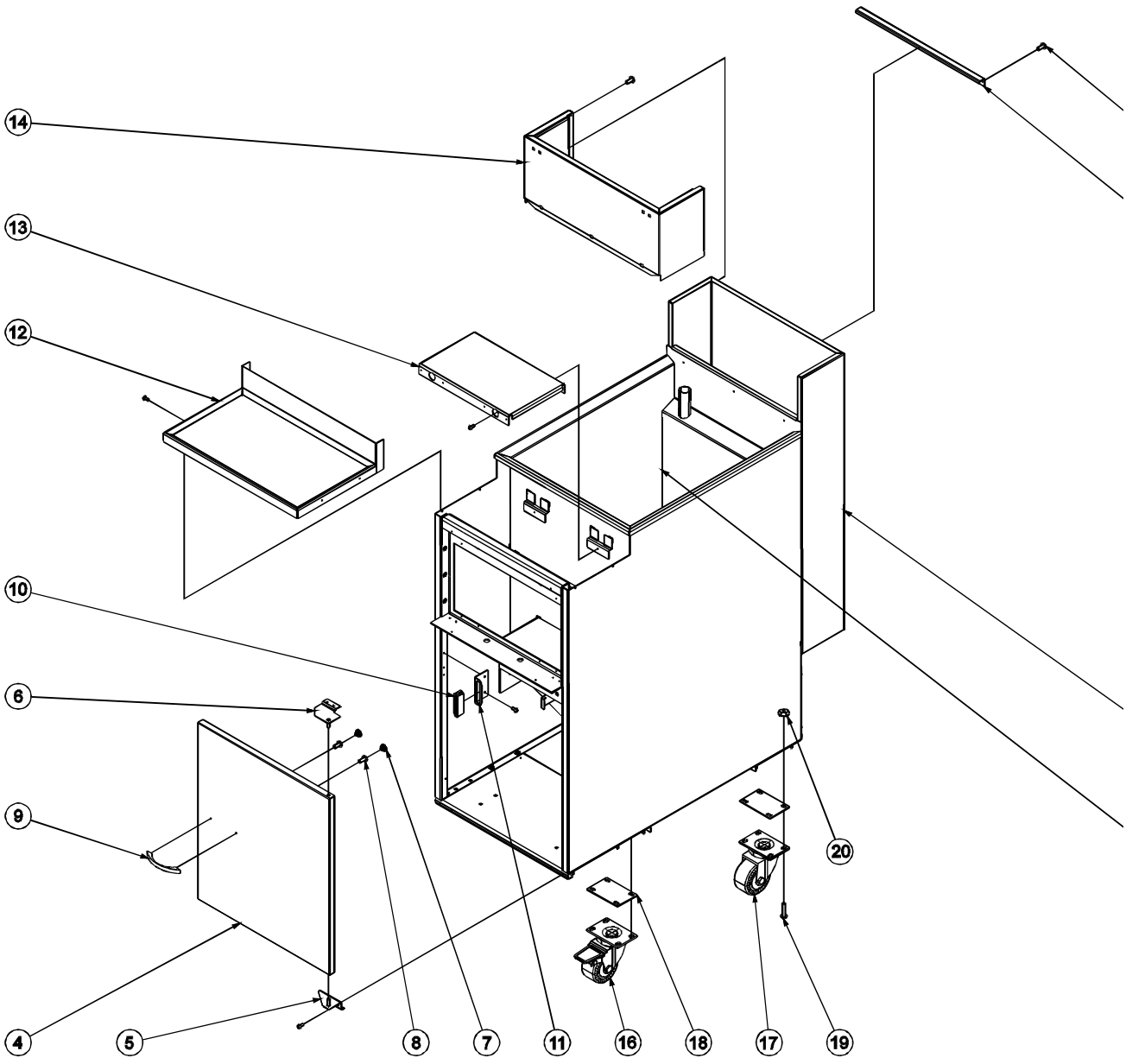


Figure 4-1 Tank and Cabinet

Table 4-2 Cabinet Joining Kit

Item #	QTY/ Unit	Part Number	Description
1	1	A1821901	Channel Support, front
2	1	A1821801	Rear Cabinet Strip
3	6	A1222501	Mounting Plate, Caster
4	3	PP10652	Caster without Brake
5	3	PP10728	Caster with Brake
6	24	P0093300	Nut, 1/4-20
7	2	A1819602	Bracket, Door Magnet
8	2	P6071300	Magnet
9	10	P0075200	Screw, 2 #8 x 1/2" Self Drill
10	24	P0020600	Bolt, 1/4-20
11	8	P0075300	Screw, 3 #10 x 5/8" Self Drill

Revised 5/28/93

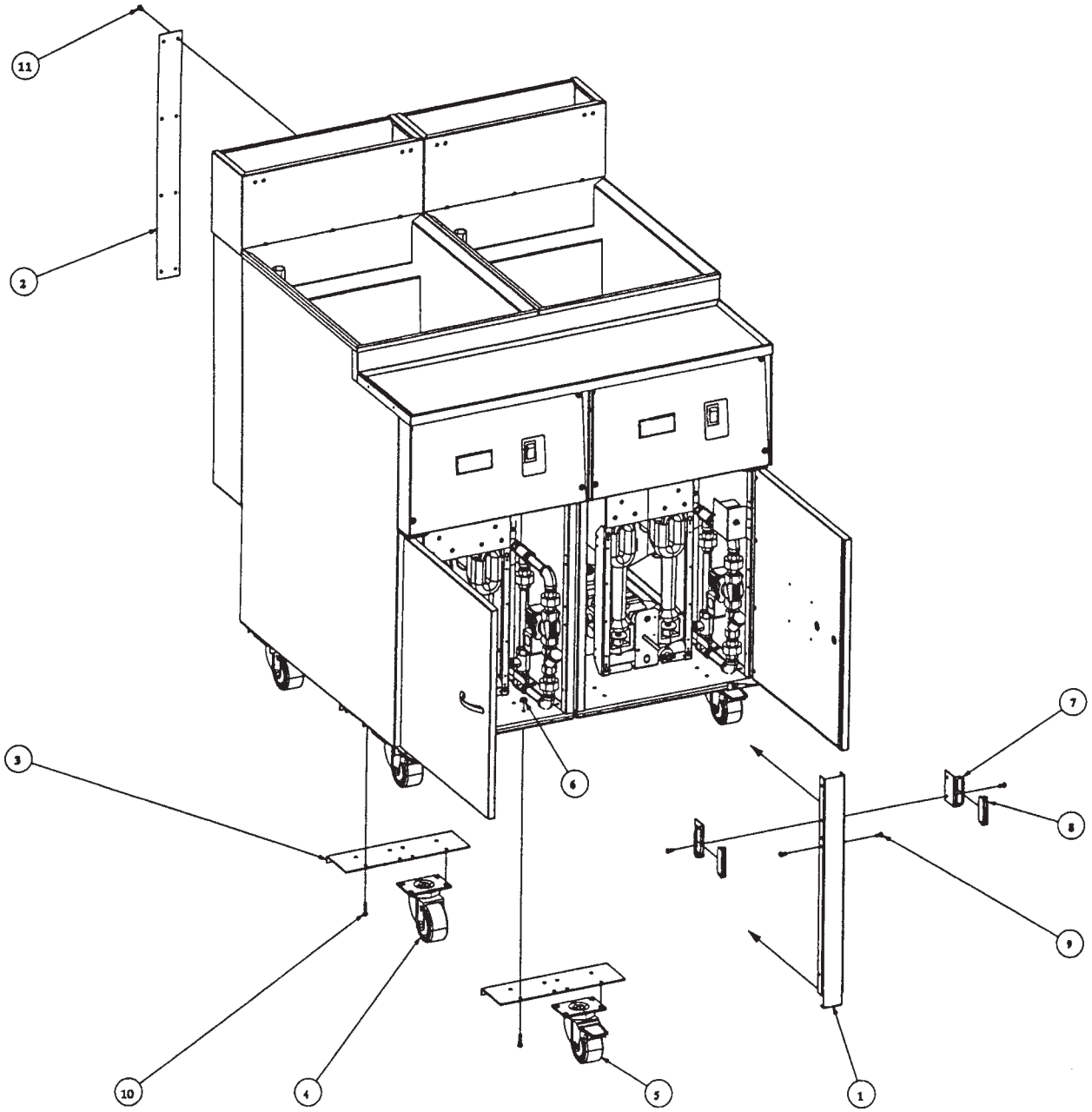


Figure 4-2 Cabinet Joining Kit

Table 4-3 Heating Components

Item #	QTY/ Unit	Part Number	Description
1	1	P6071767	Gas Shut-Off Valve
2	1	P6071450	Pilot Assembly, Nat
3	2	PP10665	Screw 10-24 x 3/8" SS
4	2	PP10665	Screw 10-24 x 3/8" SS
5	1	A3306402	Pilot Bracket
6	2	P0092300	Nut, Keep 10-24
7	1	PP10271	High-Limit
8	1	A1815501	Bracket, High-Limit
9	1	A8000801	Bracket, Manifold Mounting RH
10	1	A8013101	Bracket, Thermostat & Unitrol Extension
11	1	B7510102	Extension, Gas Valve Knob
12	1	B8009501	Manifold, Burner
13	1	A8000801	Bracket, Manifold Mounting LH
14	1	A4012801	Clamp, Unitrol Bracket
15	1	P0063500	Screw, Square Head 6-32
16	2	A8001001	Air Collar
17	2	PP10025	Screw, Air Collar Set
18	2	P6071050	Burner
19	4	PP10195	Bolt, Burner Mounting, 1/4-20
20	1	A1401002	Clamp, Bulb and Probe
21	2	PP10698	Screw, 10-24 Round Head SS
22	1	A3701002	Heat Shield, Burner
23	2	P6071341	Orifice, NAT
	2	P6071353	Orifice, LP
24	1	P5045638	Gas Valve 24V Nat
	1	P5045639	Gas Valve 24V LP
25	2	A8001101	Fittings, Burner
26	2	P6071267	Knob, Gas Valve
27	1	P5045660	Bracket
28	1	B6779850	Unitrol Limit Wires
29	1	P5047541	Thermopile

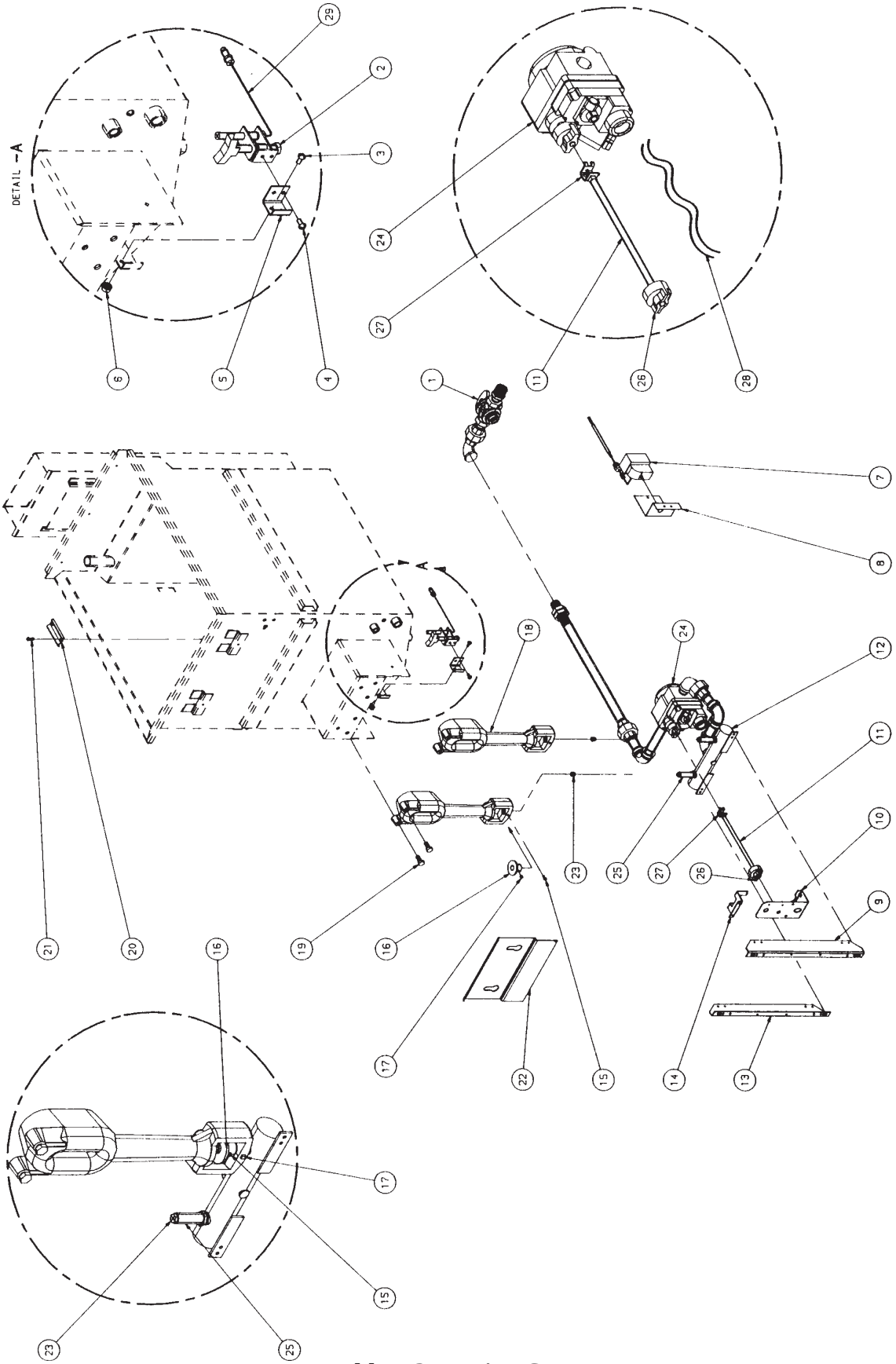


Table 4-3 Heating Components

Table 4-4 Front Panel, Assembly

Item #	Qty/ Unit	Part Number	Description
1	1	B3609601	Front Panel Weldment
2	2	P0075300	Screw 3 10 x 5/8" Self Drill
3	1	A3635002	Bezel Front Panel
4	1	PP10939	Thermostat With 24V Display
5	4	PP10195	Screw, Button Head Hex
6	1	PP10654	Switch, Rocker SPST
7	1	A6054501	Label, Switch
8	1	PP10122	Fuse, 1 Amp Slow Blow, Glass
9	2	P5045794	Fuse Holder
10	1	B6718701	Probe, Temperature Sensing
11	1	PP10439	Cable, Power With Plug
12	1	PP10146	Strain Relief 90°
13	1	PP10210	Transformer Multi to 24 VAC
14	8	PP10749	Screw 6-32 x 5/8
15	1	PP10702	Control, Liquid Level
16	1	P5046691	Relay 120 VAC SPST
17	2	P6071071	Wire Clamp
18	1	P6071223	Grommet
19	4	PP10749	Screw 6-32 x 5/8" SS
20	9	P0091400	Nutsert 6-32
21	1	A2948301	Entrance Box
22	1	P5045240	Clamp, Romex
23	1	B6714301	Harness, Control Cable
24	1	B6714101	Harness, Front Panel

Revised 5/28/93

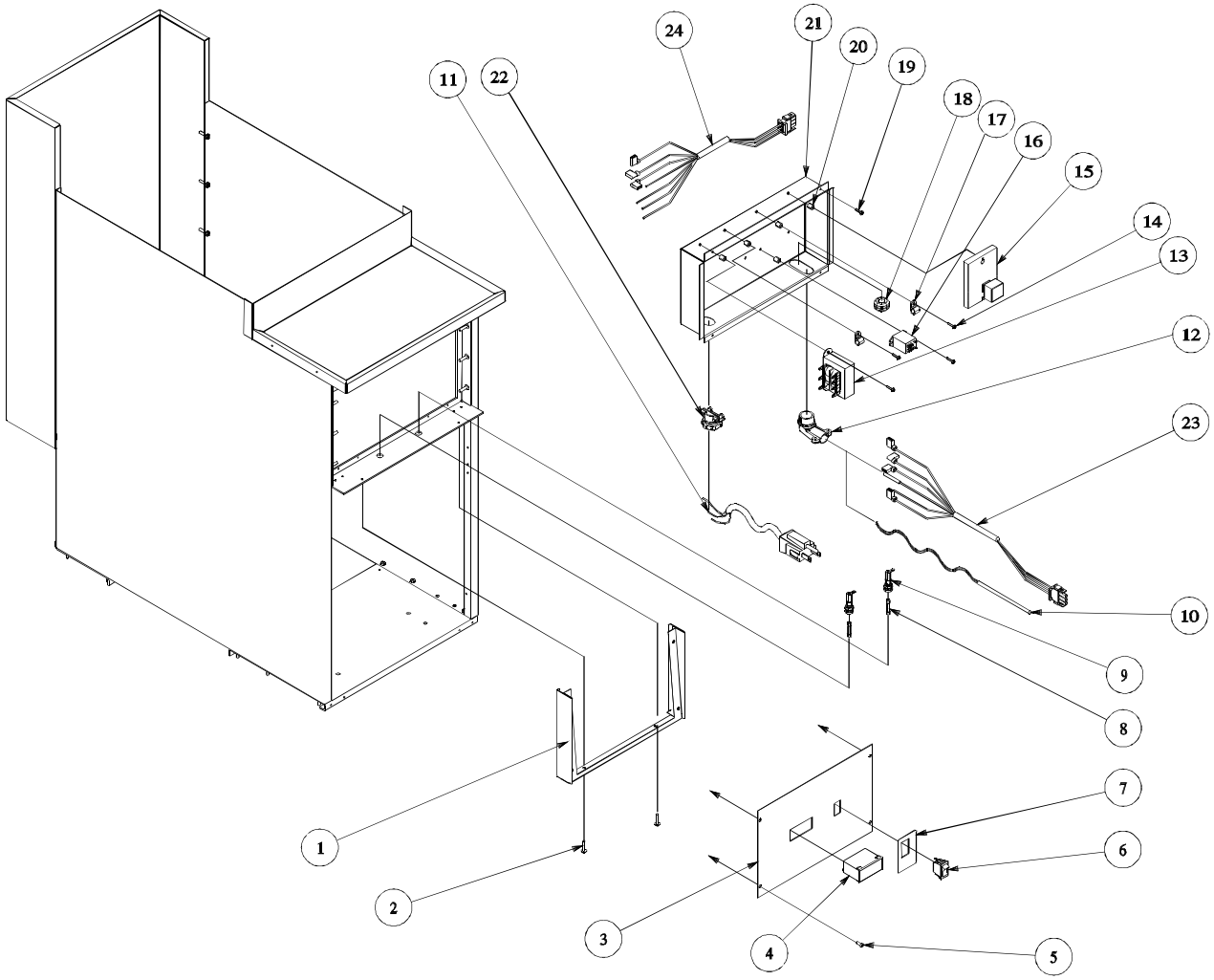


Figure 4-4 Front Panel, Assembly

Table 4-5 Tank & Fluid Components

Item #	Qty/ Unit	Part Number	Description
1	2	B4509301	Tube Screen
2	2	B4509402	Taco Rack
3	1	A5053702	Channel Strip
4	2	A5053602	Pan Holder end
5	2	A3317802	Support Hinge Rod
6	2	P0142000	Nut, Acorn, 10-24 SS
7	1	A3318902	Catch, Hinge LH
8	1	A3318702	Hinge Rod
9	2	A3319003	Handle, Catch RH
10	2	P0112000	Screw, 10-24 x 1/2" SS
11	1	A3318904	Catch, Hinge RH
12	1	A3319002	Handle, Catch LH
13	2	P6071361	Handle
14	4	PP10669	Nut, 1/4-20 SS
15	2	PP10673	Washer, Split Lock 1/4" SS
16	2	PP10670	Bolt 1/4-20 x 1" SS
17	2	P0048980	Screw, 10-32 with 1" Shoulder
18	2	P0142000	Nut, Acorn 10-24 SS
19	2	PP10729	Screw, 1/4-20 x 3/8" SS
20	2	PP10668	Nut, Acorn 1/4-20
21	2	A3317902	Cover
22	2	PP10668	Nut, Acorn 1/4-20
23	6	PP10698	Screw, 10-24 x 5/8" SS

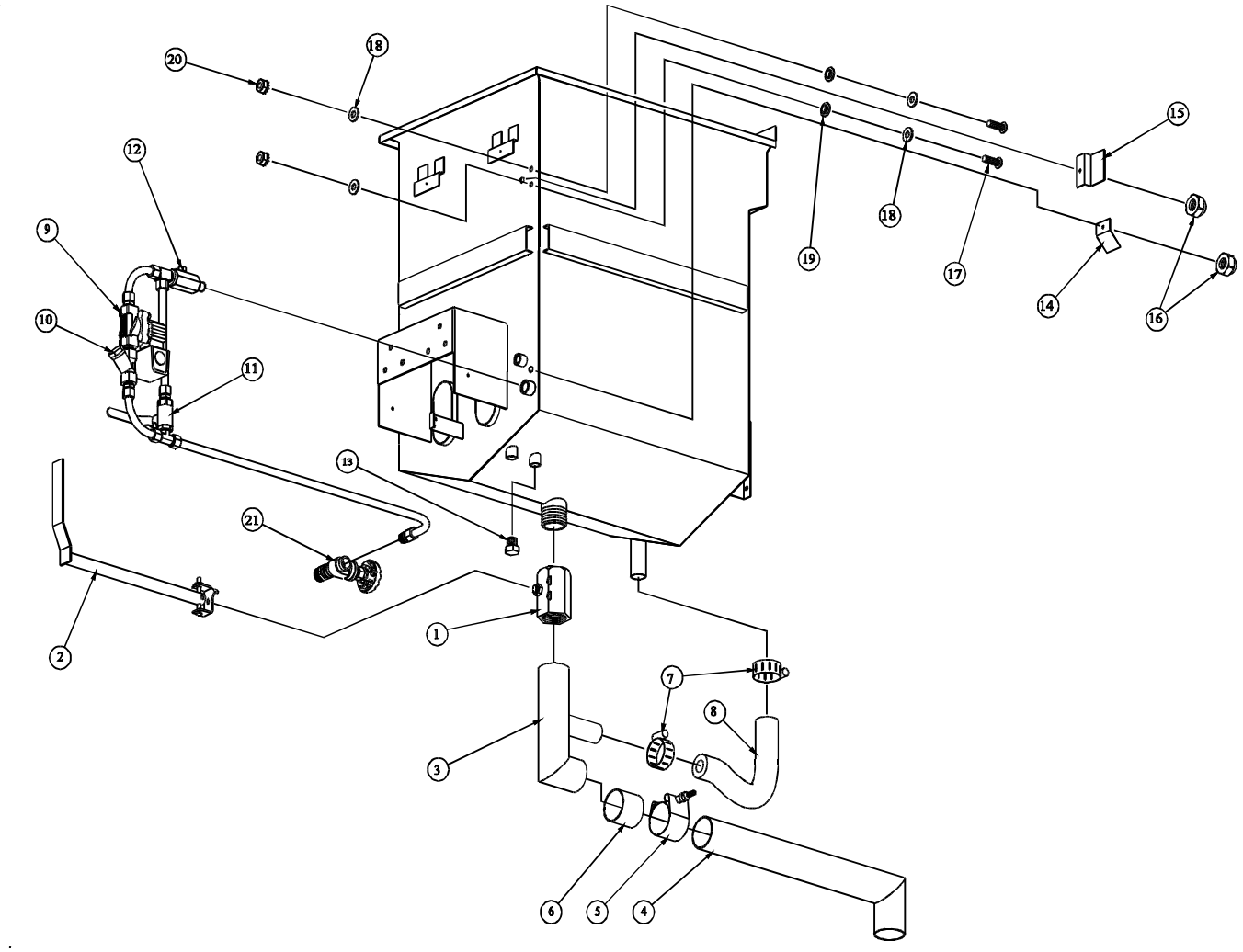


Figure 4-5 Tank & Fluid Components

Table 4-6 Dual Fryer Including Fluid & Heat Components

Item #	Qty/ Unit	Part Number	Description
1	2	PP10676	Valve, Water Inlet
2	1	PP10726	Valve, Check
3	1	PP10657	Bushing, 1/4" x 1/2" Brass
4	1	PP10659	Tee, 3/8" Brass
5	1	B8010001	Drain Line Assembly
6	2	P6071767	Valve, Gas Supply Shut Off
7	1	P7036013	Bushing, 1/2" x 3/4"
8	2	P7037750	Elbow, 90° x 1/2" Street
Not Shown	1	PP10874	Hose, Water Fill with Quick Disconnect

Revised 07/06/93

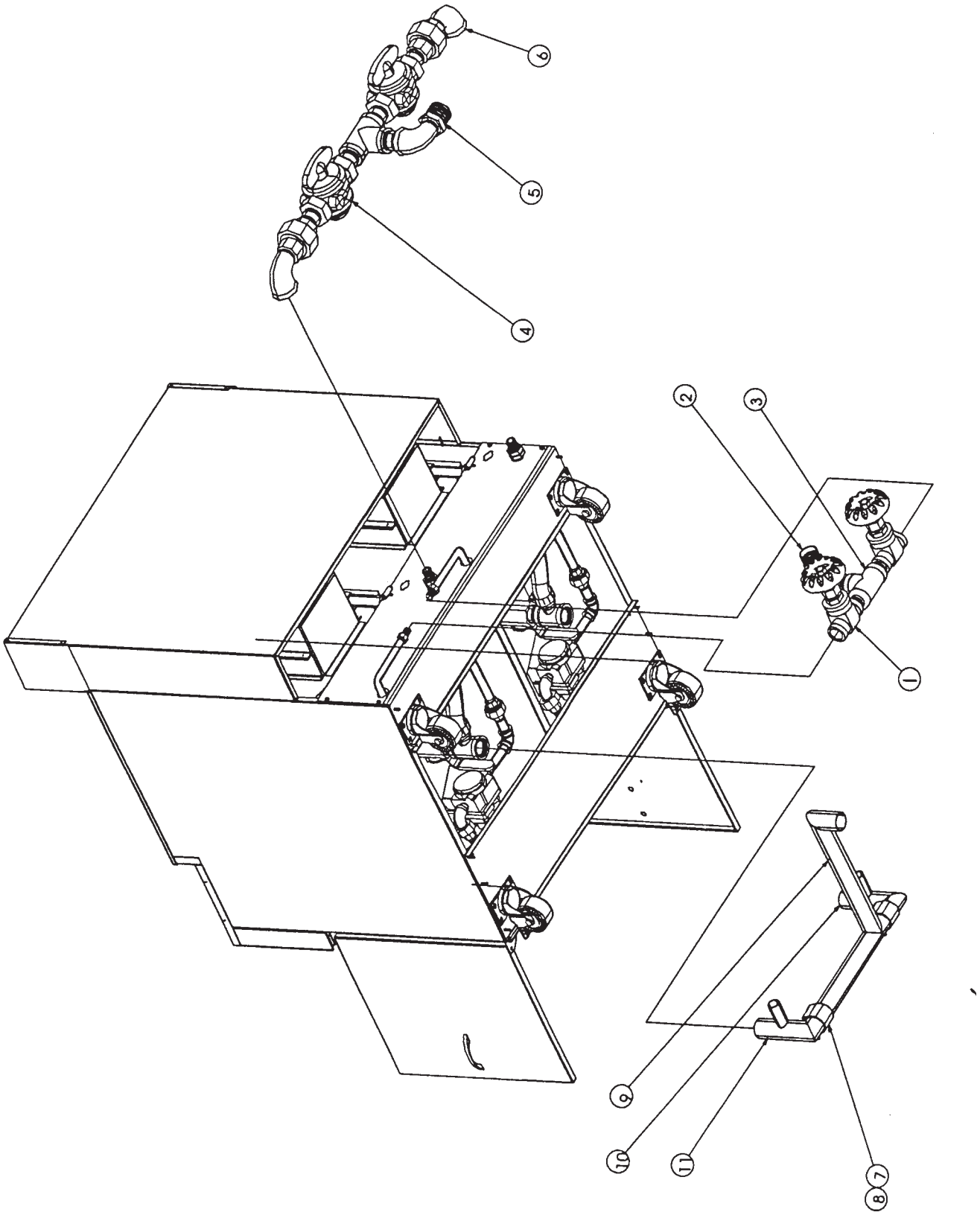


Figure 4-6 Dual Fryer Including Fluid & Heat Components

Table 4-7 Accessories Assembly

Item #	Qty/ Unit	Part Number	Description
1	1	B3310901	Cover, Tank
2	1	B4509301	Tube Screen
3	1	B4509402	Taco Rack
4	2	A5053602	Pan Holder End
5	1	A3318704	Hinge Rod
6	1	A3317802	Support, Hinge Rod
7	1	A3318904	Catch Hinge
8	1	A3319002	Handle, Catch
9	1	P6071261	Handle
10	1	PP10670	Bolt, 1/4-20 x 1" SS
11	1	P0048980	Screw, 10-32 with 1" Shoulder
12	3	PP10698	Screw, 10-24 x 5/8" SS
13	2	PP10668	Nut, Acorn
14	2	PP10669	Nut, 1/4-20 SS
15	2	PP10673	Washer, Split Lock 1/4" SS
16	1	PP10729	Bolt, 1/4-20 x 3/8" SS
17	1	P0112000	Screw, 10-24 x 1/2" SS
18	1	P0142000	Nut, Acorn 10-24 SS

Revised 5/28/93

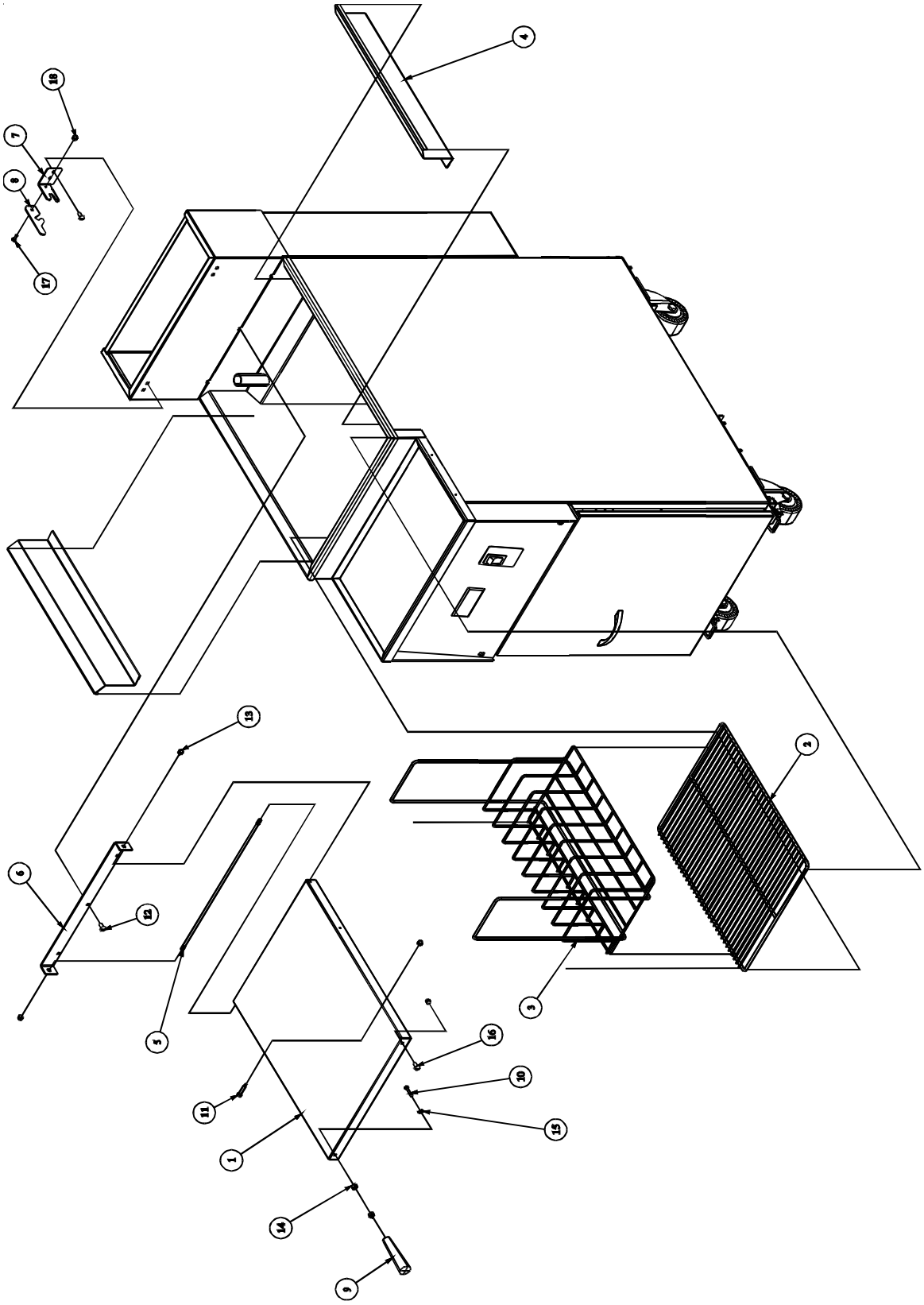


Figure 4-7 Accessories Assembly

Table 4-8 Dual Fryer with Accessories

Item #	Qty/ Unit	Part Number	Description
1	2	B4509301	Tube Screen
2	2	B4509402	Taco Rack
3	1	A5053702	Channel Strip
4	2	A5053602	Pan Holder End
5	2	A3317802	Support, Hinge Rod
6	2	PP10668	Nut, Acorn 10-24 SS
7	1	A3318902	Catch, Hinge LH
8	1	A3318702	Hinge Rod
9	2	A3319003	Handle, Catch RH
10	2	P0112000	Screw, 10-24 x 1/2" SS
11	1	A3318904	Catch, Hinge RH
12	1	A3319002	Handle, Catch LH
13	2	P6071261	Handle
14	4	PP10669	Nut, 1/4-20 SS
15	2	PP10673	Washer, Split Lock 1/4" SS
16	2	PP10670	Bolt, 1/4-20 x 1" SS
17	2	P0048980	Screw, 10-32 with 1" Shoulder
18	2	P0142000	Nut, Acorn 10-24 SS
19	2	PP10729	Screw, 1/4-20 x 3/8"SS
20	2	PP10668	Nut, Acorn 1/4-20
21	2	A3317902	Cover
22	2	PP10668	Nut, Acorn 1/4-20
23	6	PP10698	Screw, 10-24 x 5/8"SS

Revised 5/28/93

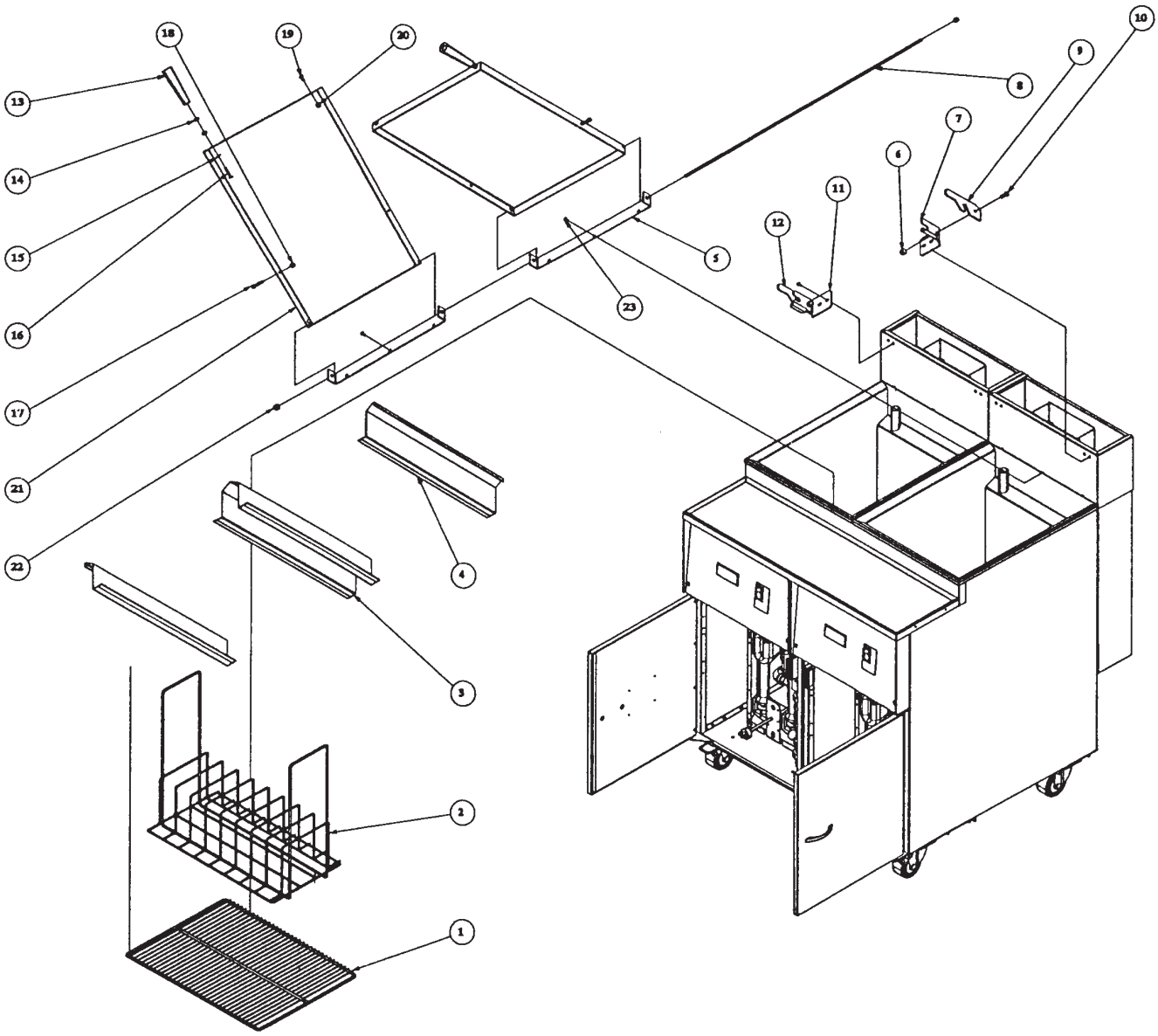


Figure 4-8 Dual Fryer with Accessories

ALPHABETICAL PART LIST

Part Description	Part Number
AIR COLLAR	A8001001
BAFFLE, TANK	B1000701
BRUSH, NYLON, STRAIGHT	PP10730
BOLT, BURNER	P0115000
BURNER	P6071050
BURNER PILOT 6CH-14-6, LP	P6071449
BURNER PILOT 6CH-14-6, NAT	P6071450
CASTER ASSY, ADJUSTABLE W/OUT LOCK, 4"	PP10808
CASTER ASSY, ADJUSTABLE W/LOCK, 4"	PP10809
CATCH MAGNET STANDARD	P6071300
CONNECTOR, PLUG, 2 - SOCKET MOLEX	P5045140
CONNECTOR, MOLEX PLUG - 4 PIN MALE	PP10202
CONNECTOR. MOLEX JACK - 4 PIN MALE	PP10203
CONNECTOR, PLUG - 9 PIN MOLEX	P5045860
CONNECTOR, PLUG - 3 PIN MOLEX	PP10090
CONNECTOR, PLUG - 2 PIN MOLEX	P5045829
CONNECTOR, PIN 24-14 AWG MOLEX	PP10173
CONNECTOR, SOCKET 24-14 AWG MOLEX	PP10172
CONNECTOR, SOCKET 24-14 AWG MOLEX	P5045862
CONNECTOR, JACK - 3 SOCKET MOLEX	PP10089
CONNECTOR, JACK - 9 SKT MOLEX	P5045838
CONNECTOR, JACK - 2 SOCKET MOLEX	P5045839
CONTROLLER, LIQUID LEVEL - SOLID STATE	PP10797
CORD, PLUG-RETRACTILE 16-3 SJO	PP10439
DRAIN VALVE, 1-1/4"	PP10565
FUSE, 2 AMP SLOW BLOW, GLASS	P5045717
FUSE, 1 AMP SLOW BLOW, GLASS	PP10122
HANDLE, DOOR	P6071516
HEAT DEFLECTOR	A3701002
HIGH LIMIT SWITCH	PP10271
HOSE, WATER FILL WITH QUICK DISCONNECT	PP10874
ORIFICE, MAIN BURNER	P6071341
PROBE, TEMPERATURE- RTG	B6718701
RELAY, 24 VDC SPDT WITH MOUNTING TABS	P5046691
STRAIN RELIEF, CONNECTOR	PP10146
SWITCH, ROCKER, SPST, 15A	PP10654
THERMOPILE	P5047541
THERMOSTAT, SOLID STATE - 24V WITH DISPLAY	PP10703
TRANSFORMER, 12012081240 TO 24V 40 VA	PP10210
UNITROL LIMIT WIRE	B6779850

ALPHABETICAL PART LIST (Continued)

Part Description	Part Number
VALVE ACTUATOR, 24 VAC, UNITROL	P5045005
VALVE, WATER - 120V SOLENOID	PP10747
VALVE, 3/8" BALL	PP10753
VALVE, GAS-UNITXOL 24 VAC (NAT)	P5045638
VALVE, GAS-UNITROL 24 VAC (PROP)	P5045639

NUMERICAL PART LIST

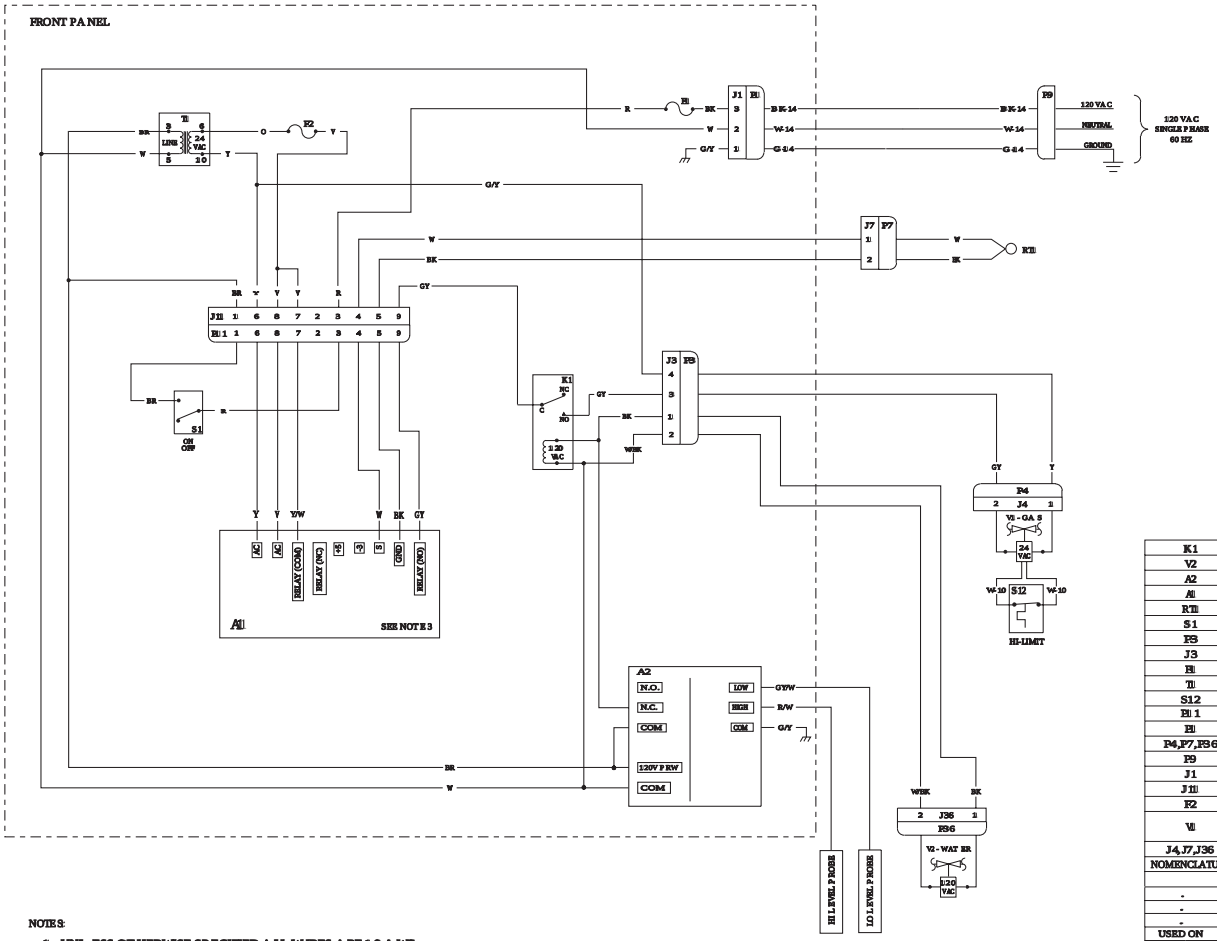
Part Number	Part Description
A3701002	HEAT DEFLECTOR
A8001001	AIR COLLAR
B6718701	PROBE, TEMPERATURE RTG
B6779850	UNITROL LIMIT WIRE
B7252402	BAFFLE, TANK
P0115000	BOLT, BURNER
PS045005	VALVE ACTUATOR, 24 VAC, UNITROL
P5045140	CONNECTOR, PLUG, 2 SOCKET MOLEX
P5045638	VALVE, GAS-UNITROL 24 VAC (NAT)
P5045639	VALVE, GAS-UNITROL 24 VAC (PROP)
P5045717	FUSE, 2 AMP SLOW BLOW, GLASS
P5045829	CONNECTOR, PLUG - 2 PIN MOLEX
P5045838	CONNECTOR, JACK - 9 SKT MOLEX
P5045839	CONNECTOR, JACK - 2 SOCKET MOLEX
P5045860	CONNECTOR, PLUG - 9 PIN MOLEX
P5045862	CONNECTOR, SOCKET, 24-14 AWG MOLEX
P5046691	RELAY 24 VDC SPDT Wi MOUNTING TABS
P5047541	THERMOPILE
P6071050	BURNER 4"
P6071300	CATCH MAGNET STANDARD
P6071341	ORIFICE, MAIN BURNER
P6071449	PILOT, LP
P6071450	PILOT, NATURAL GAS
P6071516	HANDLE, DOOR
PP10089	CONNECTOR, JACK - 3 SOCKET MOLEX
PP10090	CONNECTOR, PLUG - 3 PIN MOLEX
PP10122	FUSE, 1 AMP SLOW BLOW, GLASS
PP10146	STRAIN RELIEF, CONNECTOR
PP10172	CONNECTOR, SOCKET 24-14 AWG MOLEX
PP10173	CONNE(;TOR, PIN 24-14 AWG MOLEX
PP10202	CONNECTOR, MOLEX PLUG - 4 PIN MALE
PP10203	CONNECTOR, MOLEX JACK - 4 PIN FEMALE
PP10210	TRANSFORMER 1201208/240 TO 24V 40 VA
PP10271	HIGH LIMIT SWITCH
PP10565	DRAIN VALVE, 1-1/4"
PP10439	CORD, PLUG-RETRACTILE 16-3 SJO
PP10654	SWITCH, ROCKER, SPST, 15A
PP10703	THERMOSTAT, SOLID STATE - 24V WITH DISPLAY
PP10730	BRUSH, NYLON, STRAIGHT
PP10747	VALVE, WATER - 120V SOLENOID

NUMERICAL PART LIST (Continued)

Part Number	Part Description
PP10753	VALVE, 318" BALL
PP10797	CONTROLLER, LIQUID LEVEL- SOLID STATE
PP10808	CASTER ASSY ADJUSTABLE W/OUT LOCK, 4"
PP10809	CASTER ASSY ADJUSTABLE W/LOCK, 4"
PP10874	HOSE, WATER FILL WITH QUICK DISCONNECT

Chapter 5: Schematics

Schematic Description	Schematic Number
SCHEMATIC, GAS RETHERMALIZER, 120 VAC, 60HZ, 1PH	700139



NOTES:

1. UNLESS OTHERWISE SPECIFIED ALL WIRES ARE 18 AWG.
2. ATF USES F1 AND F2, USE F USE HOLDER (P5045794).
3. JUMPER TERMINAL +5 TO TERMINAL -3 ON A1 FOR PROGRAMMING.

K1	E5046591	RELAY, 120 VAC - SP DT W/MTG TABS
V2	PE10682	VALVE, WATER - 120V SOLENOID
A2	PE10797	CONTROLLER, LIQUID LEVEL - RELAY
A1	PE10703	THERMOSTAT, SOLID STATE - 24V W /DISPLAY
RTD	PE10704	PROBE, TEMPERATURE - RTG
S1	PE10654	SWITCH, ROCKER-SPST (ON-OFF)
P3	PP10202	CONNECTOR, PLUG-4 PIN MOLEX
J3	PE10203	CONNECTOR, JACK-4 SKT MOLEX
F1	PE10122	FUSE, GLASS - 1A MP SLOW BLOW
T1	EP10210	XFMR, 40VA - 120/208/240V TO 24V
S12	PE10084	SWITCH, HIGHTEMPERATURE LIMIT
P11	P5045860	CONNECTOR, PLUG-9 PIN MOLEX
P1	PE10090	CONNECTOR, PLUG-3 PIN MOLEX
P4,P7,P36	P5045829	CONNECTOR, PLUG-2 PIN MOLEX
P9	PP10439	CORD, PLUG-MOLDED 4-3 NEMA 5-15P
J1	PE10089	CONNECTOR, JACK-3 SKT MOLEX
J11	P5045838	CONNECTOR, JACK-9 SKT MOLEX
F2	P5045717	FUSE, 2A MP-SLOW BLOW (GLASS)
V1	P5045638	VALVE, GAS UNIT ROL BMSER 24 VAC (NAT)
	P5045639	VALVE, GAS UNIT ROL BMSER 24 VAC (PRO)
J4,J7,J36	P5045839	CONNECTOR, JACK-2 SKT MOLEX
NOMENCLATURE	PART NO.	DESCRIPTION

PARTS LIST

-	-				
-	-				
-	-				
USED ON	NEXT ASSY	.XX ? .02			
		.XXX ? .01			
REV	DWG APPROVAL	DATE	ANGLES ? 45?		
ECN NO	DR. D.B.	6-6-02			
DATE	CK -	-			
DR	ENG. SEB	7-24-02			
CK	MFG. -	-			
APPD					

FITCO FRIALATOR, INC.
P.O. BOX 501 CONCORD, NH 03302-0501

SCHEMATIC, GAS RETHERMALIZER
120 VAC, 60HZ, 1 PH

PARTNO: N/A
SIZE: D | DWG NO: 700139 | REV: 00
SCALE: NTS | SHEET: 1 OF 1

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